

STAT

Handbook of Standard  
Letter Symbols

pp. 215 to 408

(1)	(2)	(3)	(4)	(5)	(6)
Thrust, horizontal	H			GOST 2971-45	Construction mechanics
Distance from reinforcement to the nearest side of section	a			GOST 90054-40	Building construction
Distance from lateral mark of grid to the meridian	f			OST VKS 6203	Astronomy
Distance of two heavenly bodies of respective mass $m_i$ and $m_j$ , mutual	$\Delta_i$			OST VKS 6203	Astronomy
Distance, rear vertex focal	$v'$		Distance from rear vertex to rear focus	OST VKS 6145	Optics



(1)	(2)	(3)	(4)	(5)	(6)
Distance, zenith	$z$			OST VKS 6345	Geodesy and cartography
Distance of aerial photography camera, focal	$f_k$			OST VKS 7144	Aerial photography
Distance between vertex of adjacent refractive surfaces, reduced; re- duced thickness of lens	$\delta$		$\delta = \frac{d}{n}$ <p>where:  <math>d</math> - axial thickness of lens  <math>n</math> - index of refraction.            Reduced distances between            vertexes of 1st and 2nd            surfaces, 2nd and 3rd....  <math>k</math> and <math>k+1</math> surfaces, are            denoted by <math>\delta_1, \delta_2, \dots, \delta_k</math></p>	OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Distance between two points, horizontal	d			OST VKS 6345	Geodesy and cartography
Distance between rows of: rivets, keys, pins, etc	e			OST 90054-40	Building construction
Distance between points A and B of a link	$L_{AB}, l_{AB}$			GOST 2899-45	Theory of mechanisms
Distance between wing chords	h		Measured between pressure center of wings, perpendicularly to the velocity V	GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Distance between centers of deflecting and deflected magnets	R			OST VKS 7082	Terrestrial magnetism

(1)	(2)	(3)	(4)	(5)	(6)
Distance of heavenly body at moment $t_1$ , geocentric	$\Delta_i$			OST VKS 6203	Astronomy
Distance of heavenly body, reduced geocentric	$\rho_i$		$\rho_i = \Delta_i \cos \beta_i$ where: $\Delta_i$ - geocentric distance of heavenly body at moment $t_1$ , $\beta_i$ - latitude of planet at moment $t_1$	OST VKS 6203	Astronomy
Distance of neutral axis of section from terminal compressed thread	y			OST 90054-40	Building construction
Distance of objective of aerial photographic apparatus, focal	f'			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Distance of optical system, rear (principal) focal	$f'$		Rear focal distances of 1st, 2nd...k-th system are denoted by: $f'_1, f'_2, \dots, f'_k$	OST VKS 6145	Optics
Distance of optical system, forward (principal) focal	$f$		Forward focal distances of 1st, 2nd...k-th system are denoted by: $f_1, f_2, \dots, f_k$	OST VKS 6145	Optics
Distance from airdrome to area photographed	$D_s$			OST VKS 7144	Aerial photography
Distance from rear apex to rear focus; rear apex focal distance	$v'$			OST VKS 6145	Optics
Distance from image of point to optical axis	$y'$			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Distance from forward vertex to forward focus; forward vertex focal distance	v			OST VKS 6145	Optics
Distance from point to optical axis	y			OST VKS 6145	Optics
Distance from center of gravity of airplane to hinges of tail group	L			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Distance from center of gravity of airplane to hinges of horizontal tail group	L <u>2.0</u>			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Distance along the optical axis between vertex of	d			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
first and last refractive surfaces; axial thickness of lens or system					
Distances along the optical axis between vertex of adjoining refractive surfaces, 1st and 2nd, 2nd and 3rd...k and k+1	$d_1, d_2...$ $...d_k$			OST VKS 6145	Optics
Distance along the optical axis from near (principal) focus of first system to the forward (principal) focus of second system; optical interval	$\Delta$			OST VKS 6145	Optics
Distance along the optical axis from object and image to aperture stop	$p$			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Distance along the optical axis from object and image to forward principal point	a			OST VKS 6145	Optics
Distance along the optical axis from object and image to the forward principal focus	X			OST VKS 6145	Optics
Distance along the optical axis from object and image to the field stop	p'			OST VKS 6145	Optics
Distance along the optical axis from object and image to the rear principal point	a'			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Distance along the optical axis from object and image to the rear (principal) focus	$x'$			OST VKS 6145	Optics
Distance along the optical axis from point of intersection of issuing ray with optical axis to vertex of refractive surface	$s'$		Distances along the optical axis from intersection point of issuing ray with optical axis to the vertexes of 1st, 2nd ... k-th, refractive surfaces are denoted by: $s'_1, s'_2 \dots s'_k$	OST VKS 6145	Optics
Distance along the optical axis from point of intersection of incident ray with optical axis to vertex	$s$		Distances along the optical axis from intersection point of incident ray with optical axis to the vertexes of 1st,	OST VKS 6145	Optics



(1)	(2)	(3)	(4)	(5)	(6)
of refracting surface			2nd ... k-th refracting surfaces are denoted by: $s_1, s_2 \dots s_k$		
Distance, forward vertex focal	$v$		Distance from forward vertex to forward focus	OST VKS 6145	Optics
Distance of perigee of parabolic orbit from the sun	$q$			OST VKS 6203	Astronomy
Distance of perigee from rising node, angular	$\omega$			OST VKS 6203	Astronomy
Distance of planet at meridian, zenith	$z_m$			OST VKS 6203	Astronomy
Distance of planet, zenith	$z$			OST VKS 6203	Astronomy

(1)	(2)	(3)	(4)	(5)	(6)
Distance of planet in astronomical units, geocentric	$\Delta$			OST VKS 6203	Astronomy
Distance, focal	$f$			GOST 1493-42	General technical quantities
Expenditure of aerial photographs for the entire area photographed ( $\sum S$ ), total	$\sum^n$			OST VKS 7144	Aerial photography
Discharge, weight	$G$			GOST 2970-45	Hydromechanics
Expenditure of fuel and oil, hourly	$q_n$			GOST VKS 7144	Aerial photography
Expenditure of flight hours, total	$\sum^T$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Discharge, mass	M			GOST 2970-45	Hydromechanics
Discharge per width unit of flow	q			GOST 2970-45	Hydromechanics
Discharge, volume	Q			GOST 2970-45	Hydromechanics
Reactions of supports in spatial system: component reactions (on coordinate axes X, Y, Z)	X, Y, Z			GOST 2971-45	Construction mechanics
Reaction of support: vertical component	V	A		OST 90054-40	Building constructions
Reaction of support: horizontal component	H			OST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Reaction of support in plane system: vertical component of reaction	V, A			GOST 2971-45	Construction mechanics
Reaction of support in plane system: hori- zontal component of reaction	H			GOST 2971-45	Construction mechanics
Reaction of support in plane system: total reaction	R	A, B, C...		GOST 2971-45	Construction mechanics
Reaction of support in spatial system: total reaction	R			GOST 2971-45	Construction mechanics
Reaction of support, total	R			GOST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Refraction	$\rho$			OST VKS 6203	Astronomy
Refraction of lens, principal	$D_u$			OST VKS 6145	Optics
Refraction of lens, rear vertex	$V_2$			OST VKS 6145	Optics
Refraction of lens, forward vertex	$V_1$			OST VKS 6145	Optics
Refraction of infinitely thin lens	$D_o$			OST VKS 6145	Optics
Refraction of second surface of lens	$D_2$			OST VKS 6145	Optics
Refraction of first surface of lens	$D_1$			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Convergence of meridians on plane	$\gamma$			OST VKS 6345	Geodesy and cartography
Convergence of meridians on spheroid	$\gamma_s$			OST VKS 6345	Geodesy and cartography
Luminescence; luminousness	R			OST VKS 7637	Light measurements
Light sensitivity	S			GOST 2653-44	Sensitometry
Light sensitivity monochromatic; special light sensitivity	$S_\lambda$			GOST 2653-44	Sensitometry
Light sensitivity, total	S			GOST 2653-44	Sensitometry
Light sensitivity determine <sub>d</sub> on basis of	$S_0$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
conventional quantity of difference between density and fog					
Light sensitivity, spectral; monochromatic light sensitivity	$S_{\lambda}$			GOST 2653-44	Sensitometry
Light sensitivity, effective	$S_{\phi}$			GOST 2653-44	Sensitometry
Displacement, relative; angle of displacement	$\gamma$			GOST 2971-45	Construction mechanics
				GOST 90054-40	Building constructions
Displacement of phase between current and voltage; phase difference of voltage and current	$\phi$			GOST 1494-42	Electrotechnics

(1)	(2)	(3)	(4)	(5)	(6)
Series of characteristic spectrum of x-rays	K, L, M, N		Individual lines of characteristic X-ray spectrum are denoted according to Siegbahn by: $K_{\alpha 1}, K_{\alpha 2} \dots K_{\beta 1} \dots L_{\alpha 1} \dots L_{\beta 1} \dots$	OST VKS 6350	X-ray technology
Oblate of terrestrial spheroid	$\alpha$		$\alpha = \frac{a-b}{a}$ where a and b, major (a) and minor (b) half axes of terrestrial spheroid	OST VKS 6203 OST VKS 6345	Astronomy Geodesy and cartography
Force	P, Q			GOST 2970-45	Hydromechanics
Force	P, F	Q, R		GOST 1493-42	General technical quantities
Force	P, Q, R			GOST 2971-45	Construction mechanics
Force	P			OST 90054-40	Building constructions



(1)	(2)	(3)	(4)	(5)	(6)
Force	P, Q, F			GOST 2899-45	Theory of mechanisms
Force	P, F	Q, R	Projections of force upon coordinate axes, x, y, z are denoted either by $F_x$ , $F_y$ , $F_z$ or by the letters X, Y, Z	OST 2932	Theoretical mechanics
Force, aerodynamic	R		$R = c_R q S;$ $R = \sqrt{X^2 + Y^2 + Z^2}$ wherein: $c_R$ - coefficient of aerodynamic force (total) $q$ - velocity thrust (dynamic pressure) $S$ - carrying area of wings X, Y, Z components of aero- dynamic force	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Force, lateral	Z	$Z = c_z q S$ where: $c_z$ - coefficient of lateral force, $q$ - velocity thrust (dynamic pressure) $S$ - carrying area of wings		GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Force, hydrodynamic lift	Y			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Force of pressure	P			GOST 2970-45	Hydromechanics
Force of ground pressure; ground pressure	R			GOST 90054-40	Building constructions
Force, kinetic; kinetic energy	T			GOST 2971-45	Construction mechanics

(1)	(2)	(3)	(4)	(5)	(6)
Force, Kinetic; kinetic energy	E	T		GOST 2899-45	Theory of mechanisms
Forces of inertia	$P_u, Q_u,$ $F_u$			GOST 2899-45	Theory of mechanisms
Force, tangential	T			GOST 2970-45	Hydromechanics
Force, coercive; reluctivity	$H_c$			GOST VKS 6896	Ferromagnetism
Force, magnetomotive	F			GOST 1494-42	Electrotechnics
Force per unit of surface; tension; pressure	p, P			GOST VKS 6394	Thermodynamics
Force, normal	$Y_1$		Coordinate axes - body axes	GOST 1075-41	Hydro-aerodynamic computations in aircraft construction

(1)	(2)	(3)	(4)	(5)	(6)
Force, normal	N			GOST 2970-45	Hydromechanics
Force, intersecting; transversal force	Q			OST 90054-40	Building constructions
Force, lift	Y	$Y = c_y q S$ where: $c_y$ - coefficient of lift force $q$ - velocity thrust (dynamic pressure) $S$ - carrying area of wings		GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Force, total hydrodynamic	R			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Force, transversal	$Z_1$	Coordinate axes, body		GOST 1075-41	Hydro-aerodynamic

(1)	(2)	(3)	(4)	(5)	(6)
			axes		computations in aircraft construction
Force, transversal	Q			GOST 2971-45	Construction mechanics
Force, transversal; intersecting force	Q			GOST 90054-40	Building construction
Force of flight velocity	X		Coordinate axes - wind axes	GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Force, longitudinal	N			GOST 2971-45	Construction mechanics
				GOST 90054-40	Building constructions
Force of airplane, lift	P			GOST VKS 7144	Aerial photography
Intensity of light	I			GOST 1493-42	General technical quantities

(1)	(2)	(3)	(4)	(5)	(6)
Intensity of light; intensity of light of punctal source	I			GOST 2653-44 OST VKS 7637	Sensitometry Light measurements
Intensity of light of radiant flux; angular density	I			OST VKS 6261	Measurement of temperatures
Intensity of light of mono- chromatic radiant flux of wave length $\lambda$ ; angular density of wave length	$I_{\lambda}$			OST VKS 6261	Measurement of temperatures
Intensity of light of punctal source; intensity of light	I			OST VKS 7637	Light measurements

(1)	(2)	(3)	(4)	(5)	(6)
Intensity of light, specific	J			OST VKS 7637	Light measurements
Force, shearing	T			OST 90054-40	Building constructions
Force of system, kinetic	T			OST VKS 6203	Astronomy
Force of resistance, tangential	Q <sub>1</sub>		Coordinate axes, body axes	GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Force, tangential	X <sub>1</sub>		Coordinate axes, body axes	GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Force of thermocouple, thermo electromotive	e <sub>t</sub>			OST VKS 6261	Measurement of temperatures

(1)	(2)	(3)	(4)	(5)	(6)
Force, thermo electro-	et			GST VKS 7820	Measurement of
motive					temperatures
Intensity of current;	i		Working (effective) value	GOST 1494-42	Electrotechnics
current			of current is denoted by		
			the capital letter I		
Force, braking	T			GOST 90054-40	Building constructions
Force of friction,	$\tau$			GOST 2970-45	Hydromechanics
specific					
Force of thrust of	F			GOST VKS 7144	Aerial photography
propeller - engine					
unit					
Force, electromotive	e	u	Working (effective) value	GOST 1494-42	Electrotechnics
			of electromotive force is		
			denoted by capital letter E		



(1)	(2)	(3)	(4)	(5)	(6)
Deviation, magnetic	$\Delta_M$			OST VKE 7144	Aerial photography
Deviation, magnetic	D			OST VKE 7082	Terrestrial magnetism
Deviation of compass needle	$\delta$			OST VKE 6345	Geodesy and carto- graphy
Inclination of planet	$\delta$			OST VKE 6203	Astronomy
Sliding, relative	S			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Velocity	v, u, w			GOST 2970-45	Hydromechanics
Velocity	v			OST 2932	Theoretical mechanics
Velocity, vertical	$v_y$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Velocity of wind	U			GOST VKS 7144	Aerial photography
Velocity of wind; velocity of flow	W			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Velocity of second link with respect to the first link, angular	$\omega_{21}$			GOST 2899-45	Theory of mechanisms
Velocity of second link with respect to the first link in forward motion (forward couple 2, 1)	$v_{21}$			GOST 2899-45	Theory of mechanisms
Velocity of horizontal flight for all altitudes of flight, maximum	$v_{\max}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Velocity of horizontal flight for all altitudes of flight, maximum ground	$v_o \text{ max}$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Velocity of motion of point B with respect to A of the same link	$v_{BA}$			GOST 2899-45	Theory of mechanisms
Velocity of motion of film in re-winding	$v_f$			OST VKS 7146	Aerial photography
Velocity of fluid in ascending pipe	$v_h$			OST VKS 6129	Sanitation
Velocity of link, angular	$\omega$			GOST 2899-45	Theory of mechanisms

(1)	(2)	(3)	(4)	(5)	(6)
Velocity of sound	a			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Velocity of fluid in suction pipe	$v_s$			GOST VKS 6128	Hydrotechnics
Velocity, cruising	$V_k$			GOST VKS 7144	Aerial photography
Velocity, cruising	$v_{\text{крuc}}$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Velocity, critical	$V_{\text{кр}}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Velocity, linear	v	w, u		GOST 1493-42	General technical quantities

(1)	(2)	(3)	(4)	(5)	(6)
Velocity, linear	v			GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Velocity of breaking contact with the water	$v_{comp}$			GOST 1075-41	Hydro-aerodynamics
Velocity of climb (vertical) of airplane	u			OST VKS 7144	Aerial photography
Velocity of flight	v			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Velocity, handling	$v_{noc}$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction

(1)	(2)	(3)	(4)	(5)	(6)
Velocity of flow	V			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Velocity of flow; velocity of wind	W			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Velocity of flow at distance from body	$W_{\infty}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Velocity by width, relative; Froude number by width	$C_V$		$C_V = \frac{V}{\sqrt{gB}}$ where: V - velocity g - free fall accelera- tion B - width of boat or float	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Velocity in gaining altitude, optimum horizontal	$V_H$			OST VKS 7114	Aerial photography
Velocity of water flow at dam	$v_0$			OST VKS 6128	Hydrotechnics
Speed of development	$V_{np}$			GOST 2653-44	Sensitometry
Speed of disturbance propagation (speed of wave)	$c$			GOST 2970-45	Hydromechanics
Velocity of wave propaga- tion in vacuum	$c$			OST VKS 6146	Optics
Speed of airplane (relative to medium), air	$v$			OST VKS 7114	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Velocity of airplane, maximum	$V_{\max}$			OST VKS 7144	Aerial photography
Velocity of airplane, optimum	$V_u$			OST VKS 7144	Aerial photography
Velocity of airplane (minimum), landing	$V_{\min}$			OST VKS 7144	Aerial photography
Velocity of airplane (relative to ground), travel	$W$			OST VKS 7144	Aerial photography
Velocity of point of link	$v$	$V$		GOST 2899-45	Theory of mechanisms
Velocity, angular	$\omega$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction



(1)	(2)	(3)	(4)	(5)	(6)
Velocity of airplane, economic	$V_e$			GOST 2970-45	Hydromechanics
Velocity of light	$c$			GOST 1493-42	General technical quantities
Reduction drop	$\delta_{\mu}$			GOST 2971-45	Construction mechanics
				GOST 90054-40	Building constructions
				GOST 2932	Theoretical mechanics
				GOST VKS 7144	Aerial photography
				GOST 1493-42	General technical quantities
				GOST VKS 6350	X-ray technology
			Ratio of reduction co- efficients before and after limit of absorption level		

(1)	(2)	(3)	(4)	(5)	(6)
Reduction drop	$\delta_{\tau}$		Ratio of values of quantity before and after limit of absorption level, where $\tau$ — portion of reduction coefficient dependent on photo effect	OST VKS 6350	X-ray technology
Component of deviation of vertical line along longitude perpendicular to the meridian	$\eta$			OST VKS 6345	Geodesy and cartography
Component of deviation of vertical line along the meridian	$\xi$			OST VKS 6345	Geodesy and cartography
Layer of half reduction	$\Delta$		Denotation $\Delta$ is supplemented by sub-line index,	OST VKS 6350	X-ray technology

(1)	(2)	(3)	(4)	(5)	(6)
			indicating the reducing sub- stance		
Displacement on aerial photo- graph induced by relief, linear	$\Delta_k^r$			GOST VKE 71144	Aerial photography
Displacement, electric; electrical induction	D			GOST 1494-42	Electrotechnics
Resistance, effective	r			GOST 1494-42	Electrotechnics
Resistance, temporary; strength limit	$\sigma_{\pi\epsilon}$	$\sigma_B$			
Resistance, temporary; strength limit	$\sigma_n$			GOST 90054-40	Building constructions
Resistance, hydrodynamic	W			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Resistance of dielectric for direct current, electric	$R, r$		Effective resistance (for alternating current) is denoted by the same symbol but without the index - (dash) namely $R, r$	OST VKS 7771	Electrotechnics
Resistance, head	$Q$		$Q = c_x q S$ wherein: $c_x$ - coefficient of head resistance, $q$ - velocity thrust (dynamic pressure, $S$ - carrying area of wings	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Resistance, magnetic	$R$			GOST 1494-42	Electrotechnic
Resistance (electric) of platinum resistance	$R_t$			OST VKS 6261	Measurement of temperatures

(1)	(2)	(3)	(4)	(5)	(6)
thermometer, at temperature $t$					
Resistance, total	$z$			GOST 1494-42	Electrotechnics
Resistance, total (complex expression)	$z = r + jx$	where: $r$ - effective resistance $x$ - reactance		GOST 1494-42	Electrotechnics
Resistance for direct current, surface electrical	$R_v, r_v$			OST VKS 7771	Electrotechnics
Resistance for direct current, surface electrical	$R_g, r_g$			OST VKS 7771	Electrotechnics
Resistance for direct current, specific volumetric electric	$\rho_v$			OST VKS 7771	Electrotechnics

(1)	(2)	(3)	(4)	(5)	(6)
Resistance for direct current, specific surface electrical	$\rho_s$		The corresponding effective resistances (for alternating current) are denoted by the same symbols but without the index - (dash), namely, $R_v$ , $r_v$ , $R_s$ , $r_s$ , $\rho_v$ , $\rho_s$	GOST VKS 7771	Electrotechnics
Reactance	x			GOST 1494-42	Electrotechnics
Resistance of airplane, head	Q			GOST VKS 7144	Aerial photography
Resistance, specific	$\rho$			GOST 1494-42	Electrotechnics
Component of intensity of terrestrial field, vertical	z			GOST VKS 7082	Terrestrial magnetism

(1)	(2)	(3)	(4)	(5)	(6)
Component of intensity of terrestrial field, east	Y			OST VKS 7082	Terrestrial magnetism
Component of intensity of terrestrial field, north	X			OST VKS 7082	Terrestrial magnetism
Specific rotation of liquid	[ $\alpha$ ]		Expressed in degrees, the rotation angle of plane of polarized light for a column of liquid of 1 decimeter	OST VKS 6146	Optics
Power, covering	$\frac{1}{P}$			GOST 2653-44	Sensitometry
Power, resolving	$R_c$		Minimum percentage incre- ment of exposures, at which the photographic paper re- veals brightness details	OST VKS 7144	Aerial photography

(1) Power of solute, specific rotation	(2) [ $\alpha$ ]	(3)	(4) Expressed in degrees and multiplied by 100, the angle of rotation of the plane of polarized light for a column length of active solution <del>area</del> to 1 decimeter, and a concen- tration of active solute equal to 1 gram per 10 cubic centi- meters of solution	(5) OST VKS 6146	(6) Optics
Power of body, rotation	( $\alpha$ )		Angle, expressed in degrees, of rotation of plane of polarized light for a thick- ness of rotating body equal to 1 decimeter	OST VKS 6146	Optics
Power of body, emittive	e		Ratio of amount of radiant energy emitted by a surface	OST VKS 6146	Optics



(1)	(2)	(3)	(4)	(5)	(6)
			element of the given body to that emitted by an equal ele- ment of the surface of a black body at the same temperature and over the same interval of time		
Power of body, limited by two parallel planes, transmittance; coefficient of a body limited by two parallel planes	T		Ratio of light flux, having passed through the body to the incident flux	OST VKS 6146	Optics
Power of body, reflective; coefficient of reflection of body	R		Ratio of light flux reflected from the body to the incident flux	OST VKS 6146	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Power of photographic layer, resolution	R			CGST 2653-44	Sensitometry
Component of intensity of terrestrial field, horizontal (vector sum of north and east)	$H_H, H$			OST VKS 7082	Terrestrial magnetism
Degree of saturation of ground interstices by water	$K$ <u>g</u>			OST 90054-40	Building constructions
Side of aerial photograph, parallel to the abscissa axis	$l_x$			OST VKS 7144	Aerial photography
Side of aerial photograph parallel to the ordinates axis	$l_y$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Side of plane sheet frame of international grid, lateral	c			OST VKS 7144	Aerial photography
Sides, limiting area of coverage of use- ful dimension of aerial photograph on terrain	$P_x, P_y$			OST VKS 7144	Aerial photography
Sides of spherical triangle	a, b, c			OST VKS 6345	Geodesy and carto- graphy
Rise of elevation: arc, arch etc	f			GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Depth of chamber	f			GOST 2971-45	Construction mechanics

(1)	(2)	(3)	(4)	(5)	(6)
Rise of profile curvature	f			GOST 90054-40 GOST 1075-41	Building constructions Hydro-aerodynamic computations in air- craft construction
Sum of north and east components of intensity of terrestrial field, vector; horizontal com- ponent of intensity of terrestrial field	H, H <sub>H</sub>			GOST VKE 7082	Terrestrial magnetism
Temperature	t	2	Also permissible: t°	GOST 1493-42 GOST 2971-45	General technical quantities Construction mechanics

(1)	(2)	(3)	(4)	(5)	(6)
Temperature	$t^{\circ}$	<i>l</i>		OST 90054-40	Building constructions
Temperature, absolute	T	<i>l</i>	Also permissible: $T^{\circ}$	GOST 2970-45	Hydromechanics
				GOST 1493-42	General technical quantities
				GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Temperature, absolute	$T^{\circ}$			GOST 2970-45	Hydromechanics
Temperature, absolute	T			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
				GOST VKS 7772	Thermal measurements

(1)	(2)	(3)	(4)	(5)	(6)
Temperature of aneroid	$t_A$			CST VKS 6345	Geodesy and carto- graphy
Temperature of air	$t^\circ$			OST VKS 7144	Aerial photography
Temperature of air	$t$			OST VKS 6345	Geodesy and carto- graphy
Temperature of air, absolute	$T^\circ$			OST VKS 7144	Aerial photography
Temperature of air at airdrome	$t^\circ_A$			OST VKS 7144	Aerial photography
Temperature of air at altitude H	$t^\circ_H$			OST VKS 7144	Aerial photography
Temperature of air at altitude Z	$t^\circ_Z$			OST VKS 7144	Aerial photography
Temperature of air at sea level	$t^\circ_O$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Temperature, measured in international <sup>a)</sup> scale	$^{\circ}\text{C}$		Denotation used with numerical values: for example $950.5^{\circ}\text{C}$	OST VKS 6954	Temperature scale
Temperature of source, black	$T_s$			OST VKS 7820	Measurement of temperatures
Temperature, measured on the basis of $0^{\circ}\text{C}$ (international hundred degree scale)	$t$	$\theta$		OST VKS 6261	Measurement of temperatures
Temperature, measured on the basis of $0^{\circ}\text{K}$ (absolute scale)	$T$	$\Theta$		OST 6394	Thermodynamics
				OST VKS 6261	Measurement of temperatures
				OST VKS 6394	Thermodynamics
Temperature measured by means of scale of a con- stant pressure gas thermo- meter ( $p = \text{const}$ )	$t_v$			OST VKS 6261	Measurement of temperatures

(1)	(2)	(3)	(4)	(5)	(6)
Temperature measured by means of scale of a constant volume gas thermometer ( $v = \text{const}$ )	$t_p$			OST VKS 6261	Measurement of temperatures
Temperature using scale C	$t$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Temperature, radiation	$T_r$		Temperature of a black body, emitting the same total amount of radiant energy as the given body	GOST VKS 6146	Optics
Temperature, centigrade; temperature	$t$			GOST VKS 7772	Thermal measurements
Temperature measured from $0^\circ\text{K}$ ( $-273^\circ\text{C}$ )	$T$	(H)		GOST VKS 6146	Optics



(1)	(2)	(3)	(4)	(5)	(6)
Temperature, color	$T_c$			OST VKS 6261	Measurement of temperatures
				OST VKS 7820	Measurement of temperatures
				OST VKS 6146	Optics
				GOST 2653-44	Sensitometry
Temperature, black	$T_s$		Temperature of a black body emitting within a certain part of the spectrum the same amount of radiant energy as the given body	OST VKS 6146	Optics
Temperature, black; temperature, luminosity	$T_s$			OST VKS 6261	Measurement of temperatures

(1)	(2)	(3)	(4)	(5)	(6)
Temperature conductivity of substance	a			OST VKS 7772	Thermal measurements
Thermal capacity	C			GOST 1493-42	General technical quantities
Thermal capacity (true)	c		Denotation for 1 kg In denotation for 1 kg - mole it is pre- ceded, if necessary, by the letter <i>μ</i>	OST VKS 6394	Thermodynamics
Thermal capacity of substance, normal	C <sub>n</sub>			OST VKS 7772	Thermal measurements
Thermal capacity of substance; specific thermal capacity	c			OST VKS 7772	Thermal measurements

(1)	(2)	(3)	(4)	(5)	(6)
Thermal capacity, molecular	$c$			OST VKS 7772	Thermal measurements
Thermal capacity at constant pressure (true)	$c_p$		Denotation for 1 kg In denotations for 1 kg - mole, it is pre- ceded, if necessary, by the letter $\mu$	OST VKS 6394	Thermodynamics
Thermal capacity at constant volume (true)	$c_v$		Denotation for 1 kg In denotations for 1 kg - mole it is pre- ceded, if necessary, by the letter $\mu$	OST VKS 6394	Thermodynamics
Thermal capacity, mean (within the interval $t_1^\circ\text{C} - t_2^\circ\text{C}$ )	$c_m$			OST VKS 7772	Thermal measurements

(1)	(2)	(3)	(4)	(5)	(6)
Thermal capacity of body or of a system of bodies	$c_s$			OST VKS 7772	Thermal measurements
Thermal capacity, specific	$c$			OST 90054-40	Building constructions
Thermal capacity, specific; thermal capacity of substance	$c$			OST VKS 7772	Thermal measurements
Thermoconductivity; co- efficient of thermal conductivity	$\lambda$			OST 90054-40	Building constructions
Thermal conductivity of substance	$\lambda$			OST VKS 7772	Thermal measurements
Heat content	$I$			OST VKS 6394	Thermodynamics

(1)	(2)	(3)	(4)	(5)	(6)
Heat content	i		Denotation for 1 kg In denotations for 1 kg - mole it is pre- ceded, if necessary, by the letter $\mu$	OST VKS 6394	Thermodynamics
Heat content; enthalpy	I			GOST 1493-42	General technical quantities
Heat content of liquid at the moment of in- cidence of vaporization	i'		Denotation relates to 1 kg	OST VKS 6394	Thermodynamics
Heat content of super- heated steam	i		Denotation relates to 1 kg	OST VKS 6394	Thermodynamics
Heat content of dry saturated steam	i''		Denotation relates to 1 kg	OST VKS 6394	Thermodynamics

(1)	(2)	(3)	(4)	(5)	(6)
Heat of evaporation, relative to one kilogram	r		$r = i'' - i'$ where: $i''$ heat content of dry saturated steam $i'$ - heat content of liquid at moment of in- currence of vapor forma- tion	OST VKS 6394	Thermodynamics
Heat of evaporation, relative to one kilogram, external	$\psi$			OST VKS 6394	Thermodynamics
Heat of evaporation, relative to one kilogram, internal	$\rho$			OST VKS 6394	Thermodynamics
Heat of vaporization, latent	r			GOST 1493-42	General technical quantities


(1)	(2)	(3)	(4)	(5)	(6)
Heat, latent	L			GOST 1493-42	General technical quantities
Heating power; heat value	Q	H		GOST 1493-42	General technical quantities
Thickness of lens or system, axial	d		Distance along the optical axis between vertexes of first and last refracting surfaces	OST VKS 6145	Optics
Thickness of lens, reduced; reduced distance between ver- texes of adjacent re- fracting surfaces	$\delta$		$\delta = \frac{d}{n},$ where: d - axial thick- ness of lens n - index of refraction Reduced distances between vertexes of 1st and 2nd,	OST VKS 6145	Optics



(1)	(2)	(3)	(4)	(5)	(6)
			2nd and 3rd, k and k+1 surfaces are denoted by: $\delta_1, \delta_2 \dots \delta_k$		
Depth of wing profile	c			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Depth of profile, relative	$\bar{c}$		$\bar{c} = \frac{c}{b}$ where: c - depth of wing profile b - chord of wing (chord of profile)	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Thickness of welded seam along leg of right angle triangle	$h_{\text{ш}}$			OST 90054-40	Building construction



(1)	(2)	(3)	(4)	(5)	(6)
Thickness of welded seam, rated	$\sigma_{\text{wf}}$			OST 90054-40	Building constructions
Wall thickness of pipes and vessels	$\delta$			OST VKS 6128	Hydrotechnics
Thickness of wall etc	$\delta, c$			GOST 2970-45	Hydromechanics
Thickness of wall; board; side of metal beam	$c$			OST 90054-40	Building constructions
Thickness of wall; board; side of metal beam etc (dimensions of transversal section and their elements)	$c$	$\delta, d$		GOST 2971-45	Construction mechanics
Point of aerial photograph, principal	$o$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Point of vernal equinox	$\gamma$		In case of technical im- practicability the use of the greek letter $\gamma$ is permissible	OST VKS 6203	Astronomy
Point of east	E		As an index to denote "eastern" there is used "e"	OST VKS 6203	Astronomy
Point of geodesic base - of trigonometric grid (accompanying the mark)	$\square, \triangle$			OST VKS 7144	Aerial photography
Point, rear principal	H'			OST VKS 6145	Optics
Point, rear junction	K'			OST VKS 6145	Optics
Point of west	W		As an index to denote "western" there is used "w"	OST VKS 6203	Astronomy

(1)	(2)	(3)	(4)	(5)	(6)
Point, camera photogrammetrical (orientation)				OST VKS 7144	Aerial photography
Point of nadir on aerial photograph	n			OST VKS 7144	Aerial photography
Point of zero distortions on aerial photograph	c			OST VKS 7144	Aerial photography
Point, forward principal	H			OST VKS 6145	Optics
Point, forward junction	K			OST VKS 6145	Optics
Point of intersection of plane of aperture stop with the optic axis	P			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Point of intersection of plane of field stop with optic axis	P'			OST VKS 6145	Optics
Point, field photo- grammetric (orientation)				OST VKS 7144	Aerial photography
Point of relief (accompanying the mark)				OST VKS 7144	Aerial photography
Point of North	N	As an index to denote "northern" there is used "n"		OST VKS 6203	Astronomy
Point of convergence on aerial photograph, principal	i			OST VKS 7144	Aerial photography
Point of South	S	As an index to denote		OST VKS 6203	Astronomy

(1)	(2)	(3)	(4)	(5)	(6)
			"southern there is used "s"		
Points of a link	A, B...			GOST 2899-45	Theory of mechanisms
Current; force of current	i		Working (effective) value of current is denoted by capital letter I	GOST 1494-42	Electrotechnics
Accuracy of vernier (nonius)	t			OST VKS 6345	Geodesy and carto- graphy
Thrust of propeller	P			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Magnification, axial	X			OST VKS 6145	Optics
Magnification, trans- versal linear	Y			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Magnification, angular	A			OST VKS 6145	Optics
Angles	$\alpha, \beta, \gamma$			GOST 2970-45	Hydromechanics
				GOST 2899-45	Theory of mechanisms
Angles of a spherical triangle	A, B, C			OST VKS 6345	Geodesy and carto- graphy
Angle of attack, true	$\alpha_a$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of attack of wing	$\alpha$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of attack (of incidence) of airplane wings	$\alpha$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Angle of attack for $C_y = 0$	$\alpha_0$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of attack CAX	$\alpha_A$		CAX - meridian aero- dynamic chord	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle within the horizontal plane (T or E), formed by projection of principal vertical and direction toward a certain point A	$\psi_A$			OST VKS 7144	Aerial photography
Angle of incidence (of attack) of air- plane wings	$\theta$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Angle within the horizontal plane (T or E), formed by projection of principal vertical and the axis of X's	$\psi_0$			OST VKS 71144	Aerial photography
Angle of wind	$\epsilon$			OST VKS 71144	Aerial photography
Angle of internal friction friction in free-flowing materials	$\varphi$			GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Angle within plane P, formed by direction of principal vertical with the direction toward certain point a	$\psi_a$			OST VKS 71144	Aerial photography



(1)	(2)	(3)	(4)	(5)	(6)
Angle within plane P, formed by direction of principal vertical with the direction of the axis of X's	$\psi$			OST VKS 7144	Aerial photography
Angle of sighting, vertical (between perpendicular line and the direction toward point of terrain)	$\lambda$			OST VKS 7144	Aerial photography
Angle of sighting, hori- zontal (between initial starting line and the direction from the point of nadir toward the cor- responding point of terrain)	$\theta$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Angle, direction	T			OST VKS 6345	Geodesy and carto- graphy
Angle of longitudinal trim	$\varphi$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of longitudinal trim, initial	$\varphi_0$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of drift	$\psi$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of diffractive reflection	$\theta$			OST VKS 6350	X-Ray technology
Angle of diffractive reflection of the n-th order	$\theta_n$			OST VKS 6350	X-Ray technology

(1)	(2)	(3)	(4)	(5)	(6)
Angle of dielectric losses	$\delta$			GOST 1494-42	Electrotechnics
Angle of natural slope	$\varphi$			GOST 2971-45	Construction mechanics
Angle, given true travel	$\alpha_H$			OST VKS 7144	Aerial photography
Angle, given magnetic travel	$\alpha_M$			OST VKS 7144	Aerial photography
Angle of twist, linear	$\theta$			GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Angle of convergency	$\gamma$		Angle of intersection of projections of optical axes of aerial photographic	OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
			apparatus within the horizontal or the vertical plane		
Angle of cone	$2\alpha$			OST VKS 7530	Conic connections in machine building
Angle of bank	$\gamma$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Angle of bank of airplane wings	$\beta$			OST VKS 7114	Aerial photography
Angle of torsion of thread	$\Delta$			OST VKS 7082	Terrestrial magnetism
Angle of least deflection of light ray by prism	$\epsilon_0$			OST VKS 6145	Optics
Angle of inclination	$\alpha$			OST VKS 6345	Geodesy and cartography

(1)	(2)	(3)	(4)	(5)	(6)
Angle of inclination with respect to the optical axis of in- cident ray	$\alpha$			OST VKS 6145	Optics
Angle of inclination with respect to the optical axis of the issuing ray	$\alpha'$			OST VKS 6145	Optics
Angle of inclination of plane of motion relative to plane of ecliptic	i			OST VKS 6203	Astronomy
Angle with plane, directional	$\alpha, T'$			OST VKS 6345	Geodesy and cartography

(1)	(2)	(3)	(4)	(5)	(6)
Angle formed by principal planes of objective Q and the planes of negative P	$\nu_p$			OST VKS 7144	Aerial photography
Angle formed by the principal planes of objective Q and the plane of screen E	$\nu_E$			OST VKS 7144	Aerial photography
Angle formed by the optical axis of the objective of the aerial photographic apparatus, and the sighting ray	$\beta$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Angle of deviation of the magnet	$\theta$			OST VKS 7082	Terrestrial magnetism
Angle of deflection of the optical axis of the aerial photographic apparatus from the vertical	$\alpha$			OST VKS 7144	Aerial photography
Angle of deflection of optical axis of the photographic apparatus from the vertical	$\alpha$			OST VKS 7144	Aerial photography
Angle <sup>(of deflection)</sup> of flight controls	$\delta$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Angle of elevator	$\delta_e$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of rudder	$\delta_{\mathcal{N}}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of deflection of light ray by prism	$\epsilon$			OST VKS 6145	Optics
Angle of tab	$\tau$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of elevator tab	$\tau_e$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of rudder tab	$\tau_{\mathcal{N}}$			GOST 1075-41	Hydro-aerodynamic



(1)	(2)	(3)	(4)	(5)	(6)
					computations in air- craft construction
Angle of aileron tab	$\tau_{\underline{\alpha}}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of aileron	$\delta_{\underline{\alpha}}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle, actual true travel	$\beta_N$			OST VKS 7144	Aerial photography
Angle, actual magnetic travel	$\beta_M$			OST VKS 7144	Aerial photography
Angle of incidence of light ray	i		Angles of incidence of ray with 1st, 2nd ...	OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
			k-th surface are denoted by: $i_1, i_2, \dots, i_k$		
Angle, parallax	$\varphi$			OST VKS 6203	Astronomy
Angle of eccentricity of elliptic orbit	$\varphi$		$e = \sin \varphi$ where: $e$ - eccentricity of orbit	OST VKS 6203	Astronomy
Elongation, absolute: absolute longitudinal deformation on stretching	$\Delta l$	$\delta$		GOST 2971-45	Construction mechanics
Elongation, absolute; absolute longitudinal deformation on stretching	$\Delta l$			OST 90054-40	Building constructions
Aspect ratio ("Elongation of wings")	$\lambda$		$\lambda = \frac{l^2}{S}$ , where: $l$ - span of wings	GOST 1075-41	Hydro-aerodynamic computations in air-

(1)	(2)	(3)	(4)	(5)	(6)
Aspect ratio of boat or float ("Elongation of boat or float")	$\bar{L}$	$\bar{L} = \frac{L}{B},$ where: L - total length of boat B - width of boat or float	S - carrying area of wings	GOST 1075-41	craft construction Hydro-aerodynamic computations in air- craft construction
Elongation, relative	$\epsilon$	$\delta$		GOST 1493-42	General technical quantities
Elongation, relative; relative longitudinal deformation on stretching	$\epsilon$			GOST 2971-45	Construction mechanics
Aspect ratio of wetted surface ("Elongation of wetted surface")	$\lambda$	$\lambda = \frac{l}{B}$ where: l - length of wetted area		OST 90054-40 GOST 1075-41	Building constructions Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
			B - width of boat or float		
Slope	I, i			GOST 2970-45	Hydromechanics
Slope	i		One half of taper: $i = \tan \alpha$ (tangent of inclination angle)	OST VKS 7530	Conic connections in machine building
Contraction, absolute; absolute longitudinal deformation on compres- sion	$\Delta l$	$\delta$		GOST 2971-45	Construction mechanics
Contraction, absolute; absolute longitudinal deformation on compres- sion	$\Delta l$			OST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Contraction, relative; relative longitudinal deformation on compres- sion	$\epsilon$			GOST 2971-45	Construction mechanics
Tension; force per unit of surface; pressure	$P, P$			OST 90054-40 OST VKS 6394	Building constructions Thermodynamics
Time equation	$\eta$			OST VKS 7158	Measurement of time
Levels of atomic energy	$K, L_I, L_{II},$ $L_{III}, \dots$ $M_I, M_{II} \dots$			OST VKS 6350	X-Ray technology
Stress in strut of framework	$D$			OST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Stress in rod	N		General denotation	OST 90054-40	Building constructions
Stress in rod - general denotation	N, S			GOST 2971-45	Construction mechanics
Stress in upright of upper zone of frame- work	O			OST 90054-40	Building construction
Stress in upright of lower zone of frame- work	U			OST 90054-40	Building constructions
Stress in brace of frame- work	V			OST 90054-40	Building construction
Acceleration	a, j			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Acceleration	$a$	$j$		GOST 2970-45	Hydromechanics
Acceleration	$a$			OST 2932	Theoretical mechanics
Acceleration of second link relative to first, angular	$\epsilon_{21}$			GOST 2899-45	Theory of mechanisms
Acceleration of link, angular	$\epsilon$			GOST 2899-45	Theory of mechanisms
Acceleration, coriolis'	$a^{\kappa}$	$j^{\kappa}$		GOST 2899-45	Theory of mechanisms
Acceleration, linear	$a$	$j$		GOST 1493-42	General technical quantities
				GOST 2971-45	Construction mechanics
Acceleration, linear	$a$			OST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Acceleration of free fall	$g$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
				OST 2932	Theoretical mechanics
Angle, plane	$\alpha, \beta, \gamma$			GOST 1493-42	General technical quantities
				GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Angle of link rotation	$\varphi$			GOST 2899-45	Theory of mechanisms
Angle of section rotation	$\varphi$			GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions



(1)	(2)	(3)	(4)	(5)	(6)
Angle, polar (coordinates polar)	$\varphi, \theta$			GOST 2971-45	Construction mechanics
Angle of transversal $\psi$	$\psi$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of transversal careening at stop, external	$\beta'$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of transversal careening at stop, internal	$\beta$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of refraction of light ray	$i'$		Angles of refraction of a light ray on passage through 1st, 2nd ... k-th surface are denoted by $i'_1, i'_2, \dots, i'_k$	OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Angle of prism, refraction	$\theta$			OST VKS 6145	Optics
Angle of longitudinal careening of stern	$\gamma_2$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of longitudinal careening of portion between stops	$\gamma_1$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of flow direction with propeller blade profile, measured within plane of rotation	$\beta$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle, anti noseover	$\beta$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Angle of travel	$\psi$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of planet, hourly	t			OST VKS 6203	Astronomy
Angle of displacement; relative displacement	$\gamma$			GOST 2971-45	Construction mechanics
Angle of sliding	$\beta$			OST 90054-40	Building constructions
				GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of taper of flow	$\epsilon$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Angle of drift	$\varphi$			GOST VKS 7144	Aerial photography
Angle of sweepback	$\chi$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of pitching	$\theta$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle, solid	$\omega$			GOST 1493-42	General technical quantities
Angle of flight trajectory with horizon	$\theta$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Angle of friction	$\varphi$			GOST 2899-45	Theory of mechanisms

(1)	(2)	(3)	(4)	(5)	(6)
Angle of slope	$\alpha$			OST VKS 7530	Conic connections in machine building
Angle of lead	$\omega$			OST VKS 7144	Aerial photography
Angle of setting	$\varphi$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Angle of setting; inclination of blade section to plane of rotation	$\varphi$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Angle, central	$\gamma$		Angle between optical axis and radius of spherical surface	OST VKS 6145	Optics
Angle, hourly	$\odot, t$			OST VKS 7158	Measurement of time

(1)	(2)	(3)	(4)	(5)	(6)
Acceleration of force of gravity	$g$			GOST 2970-45	Hydromechanics
				GOST 1493-42	General technical quantities
				GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
Acceleration (tension) of force of gravity, observed	$g$			OST VKS 6345	Geodesy and carto- graphy
Acceleration (tension) of force of gravity at the pole	$g_p$			OST VKS 6345	Geodesy and carto- graphy
Acceleration (tension) of force of gravity at the equator	$g_e$			OST VKS 6345	Geodesy and carto- graphy

(1)	(2)	(3)	(4)	(5)	(6)
Acceleration of gravi- tation force reduced to sea level including Buge correction, observed	$g''_o$			OST VKS 6345	Geodesy and carto- graphy
Acceleration (tension) of gravitation force reduced to sea level with free air and topographic correction, observed	$g'_o$			OST VKS 6345	Geodesy and carto- graphy
Acceleration (tension) of gravitation force reduced to sea level with free air correction, observed	$g_o$			OST VKS 6345	Geodesy and carto- graphy
Acceleration of point A, normal	$a_A^n$	$j_A^n$		GOST 2899-45	Theory of mechanisms

(1)	(2)	(3)	(4)	(5)	(6)
Acceleration of point, total	$a$			GOST 2899-45	Theory of mechanisms
Acceleration of point A, tangential	$a_A^t$	$j_A^t$		GOST 2899-45	Theory of mechanisms
Acceleration of point B relative to point A of the same link, normal	$a_{BA}^n$	$j_{BA}^n$		GOST 2899-45	Theory of mechanisms
Acceleration of point B relative to point A of the same link, total	$a_{BA}$	$j_{BA}$		GOST 2899-45	Theory of mechanisms
Acceleration of point B relative to point A of the same link, tangential	$a_{BA}^t$	$j_{BA}^t$		GOST 2899-45	Theory of mechanisms
Acceleration, angular	$\epsilon$	$\theta$		GOST 1493-42	General technical quantities



(1)	(2)	(3)	(4)	(5)	(6)
Acceleration, angular	$\epsilon$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
				GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
				OST 2932	Theoretical mechanics
				OST VKS 6146	Optics
Phase of oscillation, initial	$\varphi$				
Phase, initial	$\psi$	$\varphi$		GOST 1494-42	Electrotechnics
Factor of graininess	G			GOST 2653-44	Sensitometry
Focus, rear (principal)	F'			OST VKS 6145	Optics
Focus, forward (principal)	F			OST VKS 6145	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Function, power	U			OST VKS 6203	Astronomy
				GOST 2970-45	Hydromechanics
				OST 2932	Theoretical mechanics
Function of current	$\psi, \gamma$			GOST 2970-45	Hydromechanics
Characteristic, discharge	K			GOST 2970-45	Hydromechanics
Variation of chronometer	S			OST VKS 7082	Terrestrial magnetism
Variation of clock	$\omega$			OST VKS 6203	Astronomy
Chord of vertical tail group	$b_{g.o.}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Chord of horizontal tail group	$b_{z.o.}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Chord, tip	$b_{конц}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Chord of wing; chord of profile	$b$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Chord of profile; chord of wing	$b$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Chord of rudder	$b_p$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Chord of wheel pair	$b_k$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Chord of altitude rudder	$b_g$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Chord of direction rudder	$b_{\mathcal{H}}$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Chord, mean aerodynamic	$b_A$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Chord of trimmer	$b_{mp}$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Chord of aileron	$b_{\Xi}$			GOST 1075-41	Hydro-aerodynamic computations in aircraft construction
Chronometric timing; time expended to determine aerial navigation elements	$T_{\omega}$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Value of one graduation of level in seconds of arc	$\tau$			OST VKS 6345	Geodesy and carto- graphy
Value of one graduation of micrometer knob in seconds	$\mu$			OST VKS 6345	Geodesy and carto- graphy
Value of one graduation of planimeter (absolute)	p			OST VKS 6345	Geodesy and carto- graphy
Value of one graduation of planimeter, expressed in land measure (scale or relative)	$p_s$			OST VKS 6345	Geodesy and carto- graphy
Center of rotation of link instantaneous; instantaneous center of velocities	$P_v$	P		GOST 2899-45	Theory of mechanisms

(1)	(2)	(3)	(4)	(5)	(6)
Center of projection	S			OST VKS 7144	Aerial photography
Center of velocities, instantaneous; instantaneous center of rotation of link	$P_v$	P		GOST 2899-45	Theory of mechanisms
Center of spherical surface	C		Centers of 1st, 2nd, ... k-th spherical surfaces are denoted by: $c_1$ , $c_2$ , ... $c_k$	OST VKS 6145	Optics
Center of gravity of link	$S, C$			GOST 2899-45	Theory of mechanisms
Center of acceleration of link, instantaneous	$P_a$	$U$ , $P_j$		GOST 2899-45	Theory of mechanisms
Circuit of velocity	$I'$			GOST 1075-41	Hydro-aerodynamic

(1)	(2)	(3)	(4)	(5)	(6)
					computations in air- craft construction
				GOST 2970-45	Hydromechanics
				GOST 1493-42	General technical quantities
Frequency	f	$\nu$		GOST 1494-42	Electrotechnics
				GOST VKS 6350	X-Ray technology
Frequency of oscillation	$\nu$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Frequency of oscillations	$\nu, f$				
				GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Frequency, cycle	$\omega, p$				

(1)	(2)	(3)	(4)	(5)	(6)
Frequency of oscillations, limiting highest in con- tinuous spectrum of X-rays	$\nu$			OST VKS 6350	X-Ray technology
Frequency of oscillations, angular	$\omega$			OST VKS 6146	Optics
Frequency, angular	$\omega$			GOST 1494-42	Electrotechnics
Portion of year from moment of beginning of Bessel's fictitious year	$\tau$			OST VKS 6203	Astronomy
Portion of the reduction coefficient, dependent on photoeffect	$\tau$		See: reduction co- efficient	OST VKS 6350	X-Ray technology



(1)	(2)	(3)	(4)	(5)	(6)
Portion of the reduction coefficient determined from the correlation	$\sigma$		wherein: $\mu$ - coefficient of reduction and $\tau$ the portion of the reduction coefficient dependent on photo-effect. See: coefficient of reduction	OST VKS 6350	X-Ray technology
Portion of the reduction coefficient, determining the energy of emission electrons	$\sigma_r$		See: coefficient of reduction	OST VKS 6350	X-Ray technology
Bessel's numbers for transfer of visible location into mean and vice versa (first order of magnitudes)	A, B, C, D, E A', B'			OST VKS 6203	Astronomy

(1)	(2)	(3)	(4)	(5)	(6)
Number of aerial photo- graphs (numbering by means of arabic numerals	$n$			OST VKS 7144	Aerial photography
Number of aerial photo- graphs in one flight	$n_p$			OST VKS 7144	Aerial photography
Number of aerial photo- graphs in one itinerary	$n_L$			OST VKS 7144	Aerial photography
Number of aerial photo- graphs in area S	$n_S$			OST VKS 7144	Aerial photography
Number of turns in winding	$\omega$	$n$		GOST 1494-42	Electrotechnics
Number of waves per one centimeter	$N$			OST VKS 6146	Optics

(1)	(2)	(3)	(4)	(5)	(6)
Total number of links in kinematic chain	n			GOST 2899-45	Theory of mechanisms
Number of kinematic couples of 1st, 2nd, 3rd etc class	$P_1, P_2$ $P_3$ etc	$q_1, q_2$ $q_3$ etc		GOST 2899-45	Theory of mechanisms
Number of oscillations per second	2			OST VKS 6146	Optics
Number of blades of propeller	K			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Number of itineraries	N			OST VKS 7144	Aerial photography
Number of itineraries in one flight	$N_p$			OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
Number of itineraries within area of photo- graphing ( $\sum$ )	$N_{\sum}$			OST VKS 7144	Aerial photography
Makh number	Ma		$Ma = \frac{V}{a}$ where: V - velocity of flight (or flow) a - velocity of sound	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Number of revolutions per unit of time	n			GOST 1493-42	General technical quantities
Number of revolutions per minute	n			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Number of revolutions per second	$n_s$		The denotation $n_c$ is permissible	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction

(1)	(2)	(3)	(4)	(5)	(6)
Number of revolutions of link per minute	n			GOST 2899-45	Theory of mechanisms
Number of polar plani- meter, constant	Q			OST VKS 6345	Geodesy and carto- graphy
Number of Reynolds	Re		$Re = \frac{Vl}{\nu}$	GOST 2970-45	Hydromechanics
			where: V - velocity of flight (or flow)	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
			l - characteristic linear dimension		
			$\nu$ - kinematic viscosity co-efficient		
Number of <sup>mobility</sup> <del>freedom</del> orders of the mechanisms	W			GOST 2899-45	Theory of mechanisms
Number of freedom orders of a kinematic chain	H			GOST 2899-45	Theory of mechanisms

(1)	(2)	(3)	(4)	(5)	(6)
Number of Strouhal	Sh	$Sh = \frac{V}{n_s D}$ <p>where: V - velocity of flight (or flow) <math>n_s</math> - number of revolutions per second D - diameter of propeller</p>	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction	
Number of phases	m		GOST 1494-42	Electrotechnics	
Number of Froude	Fr	$Fr = \frac{v^2}{gl}$ <p>where: V - velocity g - acceleration of free fall l - length</p>	GOST 2970-45  GOST 1075-41	Hydromechanics  Hydro-aerodynamic computations in air- craft construction	

(1)	(2)	(3)	(4)	(5)	(6)
Number of Froude by width; relative velocity by width	$c_v$		$c_v = \frac{V}{\sqrt{gB}}$ <p>where: V - velocity g - acceleration of free fall B - width of boat or float</p>	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Pitch of propeller	H			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Pitch of propeller, relative	h		$h = \frac{H}{D}$ <p>where: H - pitch of propeller D - diameter of propeller</p>	GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Spacing of threaded fittings in reinforced concrete member	$a_g$			OST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Spacing of rivets, keys, pins etc	a			OST 90054-40	Building constructions
Width	b			GOST 1493-42	General technical quantities
				OST 90054-40	Building constructions
Width	b, B			GOST 2970-45	Hydromechanics
				OST 90054-40	Building constructions
Width (dimensions of constructions and their elements)	b, B			GOST 2971-45	Construction mechanics
Width (dimensions of cross sections and their elements)	b			GOST 2971-45	Construction mechanics



(1)	(2)	(3)	(4)	(5)	(6)
Width of track	B			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Width of boat	B	$B_{\text{н}}$		GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Width of midship section	$B_{\text{н}}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Width of midship section of fuselage	$B_{\text{н.ф}}$			GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Width of ledge of T - reinforced concrete section	$b_n$			GOST 90054-40	Building constructions

(1)	(2)	(3)	(4)	(5)	(6)
Width of float	B	$B_n$		GOST 1075-41	Hydro-aerodynamic computations in air- craft construction
Latitude, geographic (astronomical)	$\varphi$			OST VKS 6345	Geodesy and carto- graphy
Latitude, geodesic	B			OST VKS 6345	Geodesy and carto- graphy
Latitude, geocentric	$\varphi'$			OST VKS 6345	Geodesy and carto- graphy
Latitude of heavenly body, heliocentric	b			OST VKS 6203	Astronomy
Latitude, corrected	u			OST VKS 6345	Geodesy and carto- graphy

(1)	(2)	(3)	(4)	(5)	(6)
Latitude of point of observation	$\varphi$			OST VKS 7082	Terrestrial magnetism
Latitude of planet	$\beta$			OST VKS 6203	Astronomy
Latitude of sun	B			OST VKS 6203	Astronomy
Latitude, mean geo- graphic (astronomical)	$\varphi_m$			OST VKS 6345	Geodesy and carto- graphy
Latitude, mean geodesic	$B_m$			OST VKS 6345	Geodesy and carto- graphy
Latitude of point of earth surface, geo- graphical	$\varphi$			OST VKS 6203	Astronomy
Latitude of point of earth surface, geo- centric	$\varphi'$			OST VKS 6203	Astronomy

(1)	(2)	(3)	(4)	(5)	(6)
Latitude, photographic	L			GOST 2653-44	Sensitometry
Latitude of emulsion, useful	L <sub>s</sub>		Difference of log of ex- posures corresponding to two points of the character- istic curve, for which the gradient has the least use- ful value	OST VKS 7144	Aerial photography
Equivalent of work, thermal	A			OST VKS 6394	Thermodynamics
Equivalent, photocentric	P			GOST 2653-44	Sensitometry
Exposure; amount of illumination	H			GOST 2653-44	Sensitometry
Exposure of photographic paper, standard	E		Determines that exposure which for a negative of density 2.0 corresponds to	OST VKS 7144	Aerial photography

(1)	(2)	(3)	(4)	(5)	(6)
			the point in the under- exposure area with the least useful gradient		
Eccentricity	e			GOST 2971-45	Construction mechanics
				OST 90054-40	Building constructions
				GOST 2899-45	Theory of mechanisms
Eccentricity of alidade	e			OST VKS 6203	Astronomy
Eccentricity of alidade or circle	e			OST VKS 6345	Geodesy and carto- graphy
Eccentricity of meridian of terrestrial spheroid	e			OST VKS 6203	Astronomy

(1)	(2)	(3)	(4)	(5)	(6)
Eccentricity of meridian of terrestrial spheroid (first)	e		$e = \frac{\sqrt{a^2 - b^2}}{a}$ <p>where: a and b - lengths of major (a) and minor (b) half axis of terrestrial spheroid</p>	OST VKS 6345	Geodesy and carto- graphy
Eccentricity of meridian of terrestrial spheroid (second)	e'		$e' = \frac{\sqrt{a^2 - b^2}}{b}$ <p>where: a and b, lengths of major (a) and minor (b) half axis of terrestrial spheroid</p>	OST VKS 6345	Geodesy and carto- graphy
Eccentricity of orbit	e			OST VKS 6203	Astronomy
Electric force; intensity of electric field	E	K		GOST 1494-42	Electrotechnics

(1)	(2)	(3)	(4)	(5)	(6)
Element of reduction, linear	$e_1$			OST VKS 6345	Geodesy and carto- graphy
Element of reduction, angular	$\theta_1$			OST VKS 6345	Geodesy and carto- graphy
Element of centering, linear	$e$			OST VKS 6345	Geodesy and carto- graphy
Element of centering, angular	$\theta$			OST VKS 6345	Geodesy and carto- graphy
Elements of epoch $t_0$ , osculatory	$a_0, e_0, \delta$			OST VKS 6203	Astronomy
Energy	$W$	$A, E$		GOST 1493-42	General technical quantities
Energy	$E, U$			GOST 2970-45	Hydromechanics

(1)	(2)	(3)	(4)	(5)	(6)
Energy	W	U		OST 90054-40	Building constructions
Energy	E			OST VKS 6394	Thermodynamics
Energy	e		Denotation for 1 Kg In denotation for 1 kg-mole it is preceded, if necessary, by the letter $\mu$	OST VKS 6394	Thermodynamics
Energy, interval	U			GOST 1493-42	General technical quantities
				OST VKS 6394	Thermodynamics
Energy, interval	u		Denotation for 1 Kg In denotation for 1 kg-mole it is preceded, if necessary, by the letter $\mu$	OST VKS 6394	Thermodynamics



(1)	(2)	(3)	(4)	(5)	(6)
Energy of liquid at the moment of incipency of vaporization, interval	$u'$		Denotation relates to 1 Kg	OST VKS 6394	Thermodynamics
Energy of radiation of X-rays of wave length $\lambda$	$W_{\lambda}$			OST VKS 6350	X-Ray technology
Energy of radiation of X-Rays, striking a given surface of irradiated medium	$W_0$			OST VKS 6350	X-Ray technology
Energy of radiation of X-rays, absorbed by the irradiated medium	$W_a$			OST VKS 6350	X-Ray technology

(1)	(2)	(3)	(4)	(5)	(6)
Energy of radiation of X-rays passing through a given area, over a given length of time	W			OST VKS 6350	X-Ray technology
Energy, kinetic	E			OST 2932	Theoretical mechanics
Energy, kinetic	T			GOST 2970-45	Hydromechanics
				GOST 1493-42	General technical quantities
Energy, kinetic; kinetic force	E	T		GOST 2899-45	Theory of mechanisms
Energy, kinetic; kinetic force	T			GOST 2971-45	Construction mechanics

(1)	(2)	(3)	(4)	(5)	(6)
Energy of superheated steam; interval	u		Denotation relates to 1 Kg	OST VKS 6394	Thermodynamics
Energy, potential	$\Pi$			GOST 2970-45	Hydromechanics
				GOST 1493-42	General technical quantities
				OST 2932	Theoretical mechanics
Energy, potential; expansible energy	U, $\Pi$			GOST 2971-45	Construction mechanics
Energy, light	L			OST VKS 7637	Light measurements
Energy, free	F			GOST 1493-42	General technical quantities
Energy, free	f		Denotation for 1 Kg In denotations for 1	OST VKS 6394	Thermodynamics

(1)	(2)	(3)	(4)	(5)	(6)
			Kg - mole it is preceded, if necessary, by the letter $\mu$		
Energy of section, specific	$\epsilon$			GOST 2970-45	Hydromechanics
Energy of saturated steam, interval	$U''$		Denotation relates to 1 Kg	OST VKS 6394	Thermodynamics
Energy, expansible; potential energy	$U, \Pi$			GOST 2971-45	Construction mechanics
Enthalpy; heat content	I			GOST 1493-42	General technical quantities
Entropy	S			GOST 1493-42	General technical quantities
				OST VKS 6394	Thermodynamics

(1)	(2)	(3)	(4)	(5)	(6)
Entropy	S		Denotation for 1 Kg In denotations for 1 Kg - mole it is pre- ceded, if necessary, by the letter $\mu$	OST VKS 6394	Thermodynamics
Entropy of a liquid at the moment of in- cipiency of vaporization	s'		The denotation relates to 1 Kg	OST VKS 6394	Thermodynamics
Entropy of superheated steam	S		The denotation relates to 1 Kg	OST VKS 6394	Thermodynamics
Entropy of dry saturated steam	s''		The denotation relates to 1 Kg	OST VKS 6394	Thermodynamics
Brightness	B			OST VKS 7637 GOST 2653-44	Light measurements Sensitometry

## PART II

Denotations of terms in alphabetical order of letters  
and of special denotations.

## Denotations

## Terms

## 1. Latin Alphabet.

A	Azimuth of geodesic line
A	Azimuth of planet
A	Activity of developing action of developer
A	Amplitude
A	Astronomical azimuth
A	Atomic weight
A	Vector potential
A	True azimuth
A	Reading by aneroid
A	Loss of light in body by absorption, expressed in parts of flux striking the body
A	Work
A	Reaction of support in plane system; vertical component of reaction
A	Thermal equivalent of work
A	Angular magnification
A	Energy
A, B, C,	Coefficients of calibration formulas for platinum resistance thermometer
A, B, C,	Points of a link

$A, B, C,$  *Angles of a spherical triangle.*  
 $A, B, C,$  Centrifugal moment of inertia relative to coordinate axes X, Y, Z.  
 $A, B, C,$  Equatorial gauss' constants  
 $A, B, C, D,$  Numbers of Bessel for reduction from apparent place to mean place and vice-versa.  
 $E, A', B'.$  (first system)  
 $(A, B, C,)$  Total reactions of supports in plane system  
 $A_K$  Internal cone  
 $A_m$  Magnetic azimuth  
 $A_o$  Reading of aneroid corrected for temperature  
 $A_\lambda$  Monochromatic photoactinic flux  
 $A'$  Back azimuth  
 $A', B'$  See numbers of Bessel for reduction of apparent place to mean place, and vice-versa, A, B, C, D, E, A', B'.  
 $a$  Amplitude of oscillation  
 $a$  Aerodynamic linear stagger  
 $a$  Major half axis of terrestrial spheroid  
 $a$  Major semi axis of orbit  
 $a$  Upper base of plane sheet frame of international grid  
 $a$  Length of major half axis of terrestrial spheroid  
 $a$  Linear acceleration  
 $a$  Reading of micrometer on adjusting hairlines to lowest mark  
 $a$  Total acceleration of point  
 $a$  Correction for condition of aneroid  
 $a$  Distance of framework to the nearest section edge  
 $a$  Distance along optical axis from object and image to forward principal point



$a$	Velocity of sound
$a$	Temperature conductivity of substance
$a$	Acceleration
$a$	Spacing of rivets, keys, pins, etc.
$a, b, c,$	Coefficients of formula correlating thermoelectromotive force of platinum-platinum- <del>rhodium</del> thermocouple with the temperature
$a, b, c,$	Sides of spherical triangle
$a, b, c,$	Equatorial gauss' constants
$a, b, c, d,$	Plane sheets of international grid
	Frame dimensions:
	$a$ - Upper base
	$b$ - Lower base
	$c$ - Lateral side
	$d$ - diagonal
$a, b, c, d, ($ $a', b', c', d', )$	Sider <sup>e</sup> ial constants of Bessel
$a_A^n$	Normal acceleration of point A
$a_A^t$	Tangential acceleration of point A
$a_{BA}$	Total acceleration of point B relative to point A of the same link.
$a_{BA}^n$	Normal acceleration of point B relative to point A of the same link
$a_{BA}^t$	Tangential acceleration of point B relative to point A of the same link
$a_s$	Spacing of threaded framework in reinforced concrete member
$a_o, e_o, \Delta o$	Osculatory elements of epoch $t_o$



$a'$  Distance along optical axis from object and image  
 to rear principal point  
 $a', b', c', d'$  Sider<sup>e</sup> constants of Bessel  
 $a^{\kappa}$  Cor<sup>i</sup>olis' acceleration  
 $B$  Geodesic latitude  
 $B$  Length of photographic base  
 $B$  Coefficient of load for swept area  
 $B$  Magnetic induction  
 $B$  Reading of mercury barometer  
 $B$  See A, B, C, (A, B, C)  
 $B$  Width  
 $B$  Width of track  
 $B$  Width of boat  
 $B$  Width of float  
 $B$  Latitude of sun  
 $B$  Brightness  
 $B^{\kappa}$  External cone  
 $B_{cl}$  Width of boat  
 $B_{m}$  Width of midship section  
 $B_{M.sp}$  Width of midship section of fuselage  
 $B_n$  Width of float  
 $B_d$  Residual magnetic induction of body  
 $B_i$  Internal magnetic induction  
 $B_m$  Mean geodesic latitude  
 $B_{max}$  Maximum magnetic induction  
 $B_r$  Residual magnetic induction of body  
 $B_s$  Internal magnetic induction of saturation  
 $B_o$  True pressure of air

B' See A', B'  
 b Basis of scale in photographing  
 b Heliocentric latitude of heavenly body  
 b Length of minor half axis of terrestrial spheroid  
 b Minor half axis of terrestrial spheroid  
 b Inclination of horizontal axis relative to horizon  
 b Lower base of plane sheet frame of international grid  
 b Reading of micrometer <sup>on</sup> ~~at~~ adjusting the hairlines to the  
 highest mark  
 b Susceptance  
 b See a, b, c.  
 b Temperature coefficient of aneroid  
 b Chord of wing; chord of profile  
 b Width  
 2b Interval of floats  
 b<sub>A</sub> Mean aerodynamic chord  
 b<sub>β</sub> Chord of elevator  
 b<sub>β.0</sub> Chord of vertical tail group  
 b<sub>γ.0</sub> Chord of horizontal tail group  
 b<sub>κ</sub> Chord of wing base  
 b<sub>κ<sub>0</sub></sub> Chord of wing tip  
 b<sub>γ</sub> Chord of directional rudder  
 b<sub>γ</sub> Width of ledge of T - reinforced concrete section  
 b<sub>ρ</sub> Chord of rudder  
 b<sub>mp</sub> Chord of trimmer  
 b<sub>ε</sub> Chord of aileron  
 b<sub>x</sub>, b<sub>y</sub>, b<sub>z</sub> Projection of base on axes of coordinates or planes  
 b' See a', b', c'  
 C Base distance of cone

C Coefficient of head resistance  
 C Coefficient of lift force  
 C Coefficient of Chezy  
 C Molecular heat capacity  
 C Correction for emergent column  
 C Constant of range finder; coefficient of range finder  
 C Constant of displacement law - law of W. Wien.  
 C Constant of equations of Wien and Planck  
 C Projection of point of zero distortions on terrain  
 C See, A, B, C (A, B, C).  
 C Thermal Capacity  
 C Center of spherical surface  
 C Center of gravity of link  
 C Electric capacity  
 C<sub>2</sub> Second constant of equations of Wien and Planck  
 °C Temperature measured by international<sup>al</sup> scale  
 C Base distance of cone  
 C Lateral side of plane sheet frame of international  
 grid  
 C Collimator error  
 C Relative thickness of profile  
 C Reduction factor of magnetic theodolite  
 C Correction  
 C Correction for emergent mercury column of thermometer  
 C Correction of direction by centering in seconds of arc  
 C Correction of aneroid scale  
 C Velocity of disturbance propagation (wave velocity)

$C$	Velocity of wave propagation in vacuo
$C$	Light velocity
$C$	See, a, b, c.
$C$	Thermal capacity (true)
$C$	Thermal capacity of substance; specific thermal capacity
$C$	Depth of wing profile
$C$	Thickness of wall, board, side of metal beam
$C$	Point of zero distortions of aerial photograph
$C$	Specific thermal capacity
$C_A$	Correction for condition of $\lambda^a$ neroid
$C_B$	Coefficient of dynamic load
$C_{w_4}$	Rated thickness of welded seam
$C_f$	Coefficient of surface friction
$C_m$	Coefficient of moment (aerodynamic)
$C_m$	Mean thermal capacity (within interval $t_1^\circ C - t_2^\circ C$ )
$C_n$	Normal thermal capacity of substance
$C_P$	Coefficient of negative thrust of propeller
$C_p$	Thermal capacity at constant pressure (true)
$C_R$	Coefficient of aerodynamic thrust of propeller (total)
$C_S$	Coefficient of speed
$C_S$	Thermal capacity of body or system of bodies
$C_V$	Relative velocity by width; Froude's number by width
$C_v$	Thermal capacity at constant volume (true).
$C_W$	Coefficient of hydrodynamic resistance
$C_K$	Coefficient of head resistance
$(-C_K)$	Coefficient of power by velocity

$c_{\kappa i}$	Coefficient of induction resistance
$c_{\kappa_1}$	Coefficient of tangential force of resistance
$(-c_{\kappa_1})$	Coefficient of tangential force
$c_{\kappa f}$	Coefficient of friction, relative to midship or area of the wings
$c_{\kappa p}$	Coefficient of profile resistance
$c_y$	Coefficient of lift force
$c_{y_1}$	Coefficient of normal force
$c_x$	Coefficient of lateral force
$c_{x_1}$	Coefficient of transversal force
$c_{\Delta}$	Coefficient of static load
$c'$	See a', b', c'.
D	Displacement, by weight, of boat
D	Diameter of propeller
D	Diopter
D	Dosage (physical)
D	Magnetic deviation
D	Optical density; optical density of blackening
D	Rated diameter
D	Stress in <del>street</del> <sup>U</sup> of framework
D	Electric displacement; electric induction
D, E, F,	Centrifugal moments of inertia relative to coordinate axes X, Y, Z.
$D_o$	Optical density of fog
$D_n$	Optical density of base
$(D_n)$	Displacement, by weight, of float
$D_{max}$	Upper limit of blackening; maximum optical density



$D_r$	Optical density of print
$D_s$	Distance from airdrome to area of photographing
$D_t$	Depression of zero point after temperature $t$ in a thermometer subjected to ageing
$D_u$	Principal refraction of lens
$D_x, D_y$	Sides limiting area covered by useful dimension of aerial photograph upon terrain
$D_\varphi$	Effective optical density
$D_o$	Major diameter of cone
$D_0$	Dosage (physical) of X-rays on surface of irradiated medium
$D_0$	Length of base reduced to sea level
$D_n$	Refraction of infinitely thin lens
$D_1$	Refraction of first surface of lens
$D_2$	Refraction of second surface of lens
$D_{  }$	Regular optical density
$D_{  }$	Diffusional optical density
$D_\Sigma$	Integral optical density
$D_\infty$	Limit optical density
$d$	Displacement, by weight, of float
$d$	Horizontal distance between two points
$d$	Diagonal of plane sheet frame of international grid
$d$	Diameter
$d$	Relative weight
$d$	Distance along optical axis between vertexes of first and last refracting surfaces; axial depth of lens or system
$d$	Rated diameter

(d)	Thickness of wall, board, side of metal beam etc. (dimensions of cross sections and their elements)
$d_p$	Diameter of aperture stop
$d_p'$	Diameter of field stop
$d_t$	Depression of zero point after temperature
$d_x$	Longitudinal useful dimension of aerial photograph
$d_y$	Transversal useful dimension of aerial photograph
$d_0$	Minor diameter of cone
$d_1, d_2 \dots d_K$	Distance along the optical axis between vertexes of adjacent refracting surfaces, 1st and 2nd, 2nd and 3rd, and $K$ th and $K+1$ th
E	Kinetic force; kinetic energy
E	Modulus of longitudinal elasticity
E	Modulus of elasticity
E	Intensity of electric field; electric force
E	Illumination
E	Plane of transformation; plane of screen
E	See, D. E, F.
E	Point of East
E	Eccentric anomaly
E	Energy
e	Electron charge
e	Emittive power of body
e	Linear element of centering
e	Distance between rows of rivets, keys, pins etc.
e	Eccentricity
e	Eccentricity of alidade or circle

e	Eccentricity of meridian of terrestrial <sup>r</sup> spheroid (first)
e	Eccentricity of meridian of terrestrial <sup>r</sup> spheroid
e	Eccentricity of orbit
e	Electromotive force
(e)	Electric potential
(e)	Difference of potentials
$e_t$	Thermoelectromotive force of a thermocouple
$e_o$	Osculatory element of epoch $t_o$ (see $a_o, e_o, \Omega_o$ )
$e'$	Linear element of reduction
$e'$	Second eccentricity of meridian of terrestrial spheroid
F	Magnetomotive force
F	Forward focus <sup>s</sup> , (principal)
F	Area swept by propeller
F	Area
F	Area of discharge
F	Light flux
F	Free energy
F	Force
F	Force of thrust of propeller-engine assembly
F	See, D, E, F.
$F_r$	Number of Froude
$F_u$	Force of inertia
$F'$	Rear focus (principal)
f	Coefficient of friction
f	Coefficient of sliding friction
f	Forward (principal) focal distance of optical system
f	Area of section
f	Correction for earth curvature and refraction



$f$	Constant of Newtonian attraction
$f$	Distance of lateral mark of grid from median
$f$	Free energy
$f$	Rise of elevation, arc, arch etc.
$f$	Depth of chamber
$f$	Rise of profile curvature
$f$	Focal distance
$f$	Frequency
$f$	Frequency of oscillations
$f, g, G, h, H,$	Quantities for the reduction of apparent location of
$i, f', g', G'$	planet to mean and vice-versa (second system)
$f_K$	Focal distance of aerial photographic camera
$f'$	Focal distance of objective of aerial photographic apparatus
$\bar{f}$	Rear (principal) focal distance of optical system
	Relative curvature of profile
$G$	Weight
$G$	Weight of link
$G$	Weight of discharge
$G$	Magnetic conductivity
$G$	Modulus of shear
$G$	Flight weight of airplane
$G$	Permanent point load; permanent loading
$G$	Point load; point loading
$G$	Factor of graininess
$G_a$	Flight weight of <sup>part</sup> <del>airplane</del>
$G_K$	Total load of airplane
$G_{u.n}$	Useful load
$G_{nyom}$	Weight of empty airplane

$G_{m+c}$  Weight of fuel and lubricant  
 $G_{s-}$  Surface electrical conductivity of dielectric for direct current  
 $G_{v-}$  Volumetric electrical conductivity of dielectric for direct current  
 $G_{-}$  Electric conductivity of dielectric for direct current  
 $G/N$  Load per H.P.  
 $G/S$  Load per  $m^2$ ; specific load  
 $G'$  See: f, g, G, h, H, i, f', g', G'  
 $g$  Conductance  
 $g$  Weight of the entire airplane in flight  
 $g$  Gradient; slope of characteristic curve  
 $g$  Observed acceleration (intensity) of force of gravity  
 $g$  Permanent distributed load; load, permanent uniform  
 $g$  Permanent uniform load; permanent distributed load  
 $g$  See: f, g, G, h, H, i, f', g', G'  
 $g$  Uniform loading  
 $g$  Acceleration of free fall  
 $g$  Acceleration of gravitation force  
 $g_e$  Acceleration of intensity of gravitation force at equator  
 $g_{min}$  Least useful gradient (corresponding to beginning of distinct rendition of light components)  
 $g_{min}$  Useful minimum gradient  
 $g_p$  Acceleration (intensity) of gravitation force at the pole  
 $g_{s-}$  Surface electrical conductivity of dielectric for direct current

$g_v$  Volumetric electrical conductivity of dielectric  
for direct current  
 $g_o$  Observed acceleration (intensity) of force of gravity  
reduced to sea level with correction for free air  
 $g_o'$  Observed acceleration of force of gravity, corrected  
for free air and including topographic correction  
 $g'$  See  $f, g, G, h, H, i, f', g', G'$ .  
 $g_o''$  Observed acceleration of force of gravity reduced  
to sea level with Bouget correction  
 $g_-$  Electric conductivity of dielectric for direct current  
 $\bar{g}$  Mean gradient  
 $H$  Absolute altitude of point  
 $H$  Vector sum of north and east components of intensity  
of terrestrial field; horizontal component of terrestrial  
field intensity  
 $H$  Height  
 $H$  Height of dam  
 $H$  Altitude of flight  
 $H$  Height of plane at moorings  
 $H$  Altitude of plane above terrain  
 $H$  Horizontal thrust  
 $H$  Length of conic connection; height of conic connection  
 $H$  Amount of illumination; exposure  
 $H$  Pressure  
 $H$  Intensity of magnetic field  
 $H$  Forward principal point  
 $H$  Reaction of support in plane system; horizontal  
component of reaction

H	See: f, g, G, h, H, i, f', g', G'
H	Number of degrees of freedom of kinematic chain
H	Pitch of propeller
(H)	Heating value; heating power
H <sub>A</sub>	Altitude above airdrome of departure
H <sub><u>al</u></sub>	Height of boat
H <sub><u>M</u></sub>	Height of midship section
H <sub><u>M. sp</u></sub>	Height of midship section of fuselage
H <sub><u>χ</u></sub>	Horizontal component of terrestrial field intensity (vector sum of north and east components)
H <sub><u>n</u></sub>	Practical ceiling
H <sub><u>c</u></sub>	Coercive force; reluctivity
(H <sub><u>c</u></sub> )	Height of plane grounded
H <sub><u>m</u></sub>	Theoretical ceiling
H <sub>d</sub>	Intensity of demagnetizing field of magnet
H <sub>e</sub>	Intensity of external magnetic field
H <sub>i</sub>	Horizon of instrument
H <sub>i</sub>	Intensity of internal magnetic field
H <sub>i</sub>	Reading of flight altitude by the altimeter
H <sub>m</sub>	Absolute ceiling of airplane
H <sub>p</sub>	Practical ceiling of airplane
H <sub>T</sub>	Altitude of airplane above mean level of given terrain; photographic altitude
H <sub>T</sub>	Intensity of terrestrial magnetic field (total)
H <sub>u</sub>	Maximum working altitude
H'	Rear principal point
H <sub>o</sub>	Intensity of demagnetizing field
h	Height

$h$  Amplitude of wave  
 $h$  Altitude of ray incidence to system  
 $h$  Height of float  
 $h$  Altitude of planet above horizon  
 $h$  Height of layer of atmospheric precipitation  
 $h$  Depth  
 $h$  Depth of flow of under water  
 $h$  Metacentric height  
 $h$  Quantum constant of planck  
 $h - h$  Direction of principal horizontal on aerial photograph  
 $h$  Relative pitch of propeller  
 $h$  Planck's constant  
 $h$  Transcendence of one point of ground surface above another  
 $h$  Transcendence of one point of terrain above another  
 $h$  Difference of altitudes  
 $h$  Distance between wing chords  
 $h$  See,  $f$ ,  $g$ ,  $G$ ,  $h$ ,  $H$ ,  $i$ ,  $f'$ ,  $g'$ ,  $G'$ .  
 $h_A$  Altitude of airdrome above sea level  
 $h_a$  Transcendence of mean level of relief of terrain above airdrome  
 $h_B$  Metacentric transversal height  
 $h_n$  Height of ledge of T-reinforced concrete section  
 $h_{w_3}$  Thickness of welded seam along leg of right triangle  
 $h_c - h_c$  Direction of line of undistorted scale  
 $h_m$  Mean difference of altitudes within one aerial photograph



$h_i - h_i$	Direction of line of horizon on aerial photograph
$h_L$	Metacentric longitudinal height
$h_o$	Height of wave in reservoir
$h_o$	Useful height of reinforced concrete section
$h_o$	Elevation of mean relief level of terrain above sea level
$h_1, h_2, \dots, h_k$	Height of incidence of ray at 1st, 2nd, kth refracting surfaces
$h'$	Height of exit of ray from system
$I$	Intensity of radiation
$I$	Magnetic dip
$I$	Moment of inertia
$I$	Intensity of light; intensity of light of point source
$I$	Angular density; light $\square$ intensity of radiant flux
$I$	Inclination
$I$	Enthalpy; heat content
$I_d$	Residual magnetization of body
$I_{max}$	Maximum magnetization; maximum intensity of magnetization
$I_{med}$	Median magnetization; median intensity of magnetization
$I_r$	Residual magnetization of substance; residual intensity of magnetization of substance
$I_s$	Intensity of magnetization of saturation; magnetization of saturation
$I_\lambda$	Intensity of radiation of X-rays of $\lambda$ wave length
$I_\lambda$	Intensity of light of a monochromatic radiant flux of wave length $\lambda$ ; angular density of wave length $\lambda$
$I_o$	Intensity of radiation of X-rays on the surface of the

irradiated medium  
 i Principal convergence point of aerial photograph  
 i Altitude of horizontal rotation axis of instrument's  
 telescope above the ground  
 i Coefficient of rigidity  
 i Inclination of the alidade axis relative to the  
 horizon  
 i Transmission ratio  
 i Radius of inertia  
 i Intensity of current; current  
 i See  $f, g, G, h, H, i, f', g', G'$ .  
 i Heat content  
 i Heat content of superheated steam  
 i Angle of inclination of plane of motion relative  
 to plane of ecliptic  
 i Angle of incidence of light ray  
 i Inclination  
 $i_x, i_y, i_z$  Radii of inertia relative to the axes  
 i' Angle of refraction of light ray  
 i' Heat content of liquid at the moment of incipency of  
 vaporization  
 i'' Heat content of dry superheated steam  
 J Coefficient of resistance  
 J Moment of inertia  
 J Magnetization; intensity of magnetization  
 J Intensity of vortex filament; intensity of vortex  
 J Intensity of light  
 J Specific intensity of light  
 $J_x, J_y, J_z$  Moments of inertia relative to the coordinate axes  
 $XY, ZX, ZY$ .

$J_{xy}, J_{zx}, J_{zy}$  Centrifugal moments of inertia relative to axes  
 $X, Y, Z$ .  
 $j$  Acceleration  
 $(j)$  Linear acceleration  
 $(j)$  Total acceleration of point  
 $(j_A^n)$  Normal acceleration of point A.  
 $(j_A^t)$  Tangential acceleration of point A  
 $j_{BA}$  Total acceleration of point B relative to point A  
of the same link  
 $(j_{BA}^n)$  Normal acceleration of point B relative to point A  
of the same link  
 $(j_{BA}^t)$  Tangential acceleration of point B relative to point  
A of the same link  
 $j_K$  Coriolis' acceleration  
 $K$  Efficiency  
 $K$  Coefficient of scale alteration in reproduction  
 $K$  Coefficient of refraction  
 $K$  Moment of inertia of magnetic system  
 $K$  Relative visibility  
 $K$  Forward junction point  
 $K$  Absorption of light per centimeter of path  
 $K$  Constant of continuous wedge  
 $K$  Discharge characteristic  
 $(K)$  Intensity of electric field; electric force  
 $K, L, M, N$  Series of characteristic spectrum of X-rays  
 $K, L_I, L_{II}, L_{III} \dots M_I, M_{II}$  } Energy levels of atom  
 $K_z$  Hydrodynamic efficiency



$K_{np}$	Constant of development kinetics
$K_c$	Constant of stepped wedge
$K_{\phi}$	Coefficient of filtration
$K_{f_1}$	First power of light filter
$K_{f_2}$	Second power of light filter
$K_{\lambda}$	Relative visibility of monochromatic light of wave length $\lambda$
$K'$	Rear junction point
$k$	Gauss' constant
$k$	Performance by weight
$k$	Taper
$k$	Coefficient of scale alteration in reduction
$k$	Coefficient of flotation margin
$k$	Coefficient of expenditure fluctuation (ratio of maximum hourly expenditure to average hourly expenditure on a yearly basis)
$k$	Coefficient of light quenching
<del><math>k</math></del>	<del>Coefficient of flotation margin</del>
$k$	Coefficient of coupling
$k$	Coefficient of heat transfer
$k$	Coefficient of rolling friction
$k$	Coefficient in correction for temperature of cold end of thermocouple
$k$	Coefficient of filtration
$k$	Constant annual aberation <sup>r</sup> <sub>λ</sub>
$k$	Number of propeller blades
(k)	Scale

k <sub>g</sub>	Degree of saturation of ground interstices by water
k'	Coefficient of scale alteration in transformation
k'	Coefficient of light absorption
k'	Constant daily aberration
L	Geodesic longitude
L	Distance of flight
L	Length
L	Length of cone
L	Length of dam along crest
L	Length of landing run
L	Length of take off run
L	Length of airplane
L	Length of seconds pendulum
L	Inductance; coefficient of self-induction
L	Interval of exposure
L	True longitude of the sun
L	Momentum moment of system (principal)
L	Momentum moment of point
L	Reading of limb with "circle left"
L	Reading of the horizontal or vertical circle with the vertical circle disposed to the left
L	Total length of boat
L	Work
L	Distance from center of gravity of the airplane to hinges of tail group
L	Light energy
L	Latent heat

L	Photographic latitude
L	See K, L. M, N.
(L)	Power
(L)	Work
2L	Length of wave in reservoir
$L_{2.0}$	Distance from center of gravity of airplane to the hinges of horizontal tail group.
$L_{\kappa}$	Length of stern portion of boat
$L_{\mu}$	Length of between steps portion of boat
$L_M$	Length of one itinerary of photographing
$L_{\chi}$	Length of prow portion of boat
( $L_{no.}$ )	Distance of flight
( $L_{\eta}$ )	Landing run
( $L_{pa3}$ )	Take off run
$L_{AB}$	Distance between points A and B of link
$L_g$	Useful interval of exposure
$L_{\zeta, \kappa}$	Mutual inductivity; coefficient of mutual induction
$L_{max}$	Total interval of exposure
$L_N$	Total length of photographic itineraries (laid down during one flight)
$L_S$	Total length of all photographic itineraries within the given area.
$L_s$	Grading of photographic paper, corresponding to the useful width of negative emulsion
$L_s$	Useful width of the emulsion
$L_x, L_y$	Lines limiting area covered upon terrain by one aerial photograph
$L_I, L_{II}, L_{III}$	See K, $L_I, L_{II}, L_{III} \dots M_I, M_{II}$
$\bar{L}$	Aspect ratio of boat or float

1	Altitude of sighting point above ground
1	Heliocentric longitude of heavenly body
1	Length
1	Length of wing float
1	Span of wings
1	Rated length of cone
1	Wetted length
(1)	Course
1 <sub>2.0</sub>	Span of horizontal tail group
1 <sub><math>\kappa</math></sub>	Length of stern portion of float
1 <sub><math>\mu</math></sub>	Length of prow portion of float
1 <sub><math>\rho</math></sub>	Interval of brightness of object
1 <sub><math>\beta</math></sub>	Span of aileron
1 <sub>AB</sub>	Distance between points A and B of link
1 <sub>i</sub>	Interval of illumination of optical image
1 <sub>n</sub>	Total length aerial photography film
1 <sub>t</sub>	Length of tape, wire or rod at temperature
1 <sub>x</sub>	Side of aerial photograph parallel to the axis of abscissas
1 <sub>y</sub>	Side of aerial photograph parallel to the axis of ordinates
1 <sub>z</sub>	Correction for displacement of zero point
M	Mutual inductivity; coefficient of mutual induction
M	Moment of rotation
M	Mean <sup>G</sup> Greenwich time, reckoned from noon
M	Moment of flexure
M	Mass discharge
M	Molecular weight

M	Moment of couple of force
M	Bearing moment of flexure
M	Total aerodynamic moment
M	Total hydrodynamic moment
M	Moment of force
M	Moment of force relative to a point
M	Curvature radius of meridian section of terrestrial spheroid
M	See, K, L, M, N
M	Mean anomaly
M	Mean solar <sup>G</sup> / <del>X</del> Greenwich time
(M)	Mass
MO	Zero point of vertical circle
MZ	Zenith point of vertical circle
Ma	Number of <sup>M</sup> / <del>X</del> Mach
M <sub>X</sub>	Moment of torsion
M <sub>g</sub>	Center moment
M <sub>S</sub>	Meridian point of horizontal circle
M <sub>X</sub> , M <sub>X1</sub>	Moment of bank
M <sub>y</sub> , M <sub>y1</sub>	Moment of yawing
M <sub>Z</sub>	Point of zenith of vertical circle
M <sub>z</sub> , M <sub>z1</sub>	Moment of pitching
M <sub>φ</sub>	Moment of longitudinal trim
M <sub>ψ</sub>	Moment of drift
M <sub>0</sub>	Mean anomaly of epoch
M <sub>I</sub> , M <sub>II</sub>	See K, L <sub>I</sub> , L <sub>II</sub> , L <sub>III</sub> ... M <sub>I</sub> , M <sub>II</sub>
1:M	Numerical scale of photoplan



m	Quantity for computation of precession in right ascension
m	Apparent magnitude of star
m	Coefficient of weir discharge
m	Magnetic mass
m	Maximum linear scale
m	Mass
m	Mass of link
m	Mass of planet or comet
m	Mass of a point
m	Local mean time, reckoned from noon
m	Mean solar time (local)
m	Number of phases
$m_c$	Civil time (local)
$m_M$	Coefficient of aerodynamic moment (total)
$m_{M_0}$	Coefficient of moment at zero lift force
$m_x, m_{x_1}$	Coefficient of bank moment
$m_y, m_{y_1}$	Coefficient of yawing moment
$m_z, m_{z_1}$	Coefficient of pitching moment
$m_{\Delta}$	Coefficient of moment by width and load
l:m	Numerical scale of aerial photograph along line $h_c - h_c$ (line of undistorted scale)
l:m	Numerical scale of transformed aerial photograph
l: $m_h$	Numerical scale along principal horizontal
l: $m_v$	Numerical scale along principal vertical

N Magn<sup>e</sup>~~X~~ tometric coefficient of demagnetization  
 N Power  
 N Normal force  
 N Constant nutation  
 N Longitudinal force  
 N Projection of nadir point of aerial photograph upon  
 terrain  
 N Radius of curvature of terrestrial spheroid Section  
 perpendicular to the meridian section  
 N See K, L, M, N  
 N Point of North  
 N Stress in rod, general denotation  
 N Number of waves <sup>V</sup>~~X~~ per one centimeter  
 N Number of itineraries  
 N<sub>e</sub> Effective power  
 N N<sub>nom</sub> Nominal power  
 N n Needed power  
 N p Available power  
 N PKC Operation power  
 N<sub>B</sub> Ballistic coefficient of demagnetization  
 N<sub>b</sub> Ballistic coefficient of demagnetization of a permanent  
 magnet  
 N<sub>max</sub> Maximum power  
 N<sub>p</sub> Number of itineraries per one flight  
 N<sub>Σ</sub> Number of itineraries within area of photographing ( $S_{\Sigma}$ )  
 n Valency

n Quantity for computation of precession in declination  
 n Coefficient of refraction  
 n Coefficient of roughness  
 n Minimum linear scale  
 n Ratio of elasticity moduli of materials  
 n Reading of magnetometer or along ordinate of magnetogram  
 n Index of refraction  
 n Index of refraction of medium preceding the system  
 n Porosity  
 n Order of diffractive image  
 n Mean daily motion  
 n Point of nadir on aerial photograph  
 n Number of aerial photographs (numbered using arabic  
 numerals)  
 n Number of all links of a kinematic chain  
 n Number of revolutions of link per minute  
 n Number of revolutions per unit of time  
 n Number of revolutions per minute  
 (n) Number of turns in winding  
 $n_o$  Index of refraction of ordinary wave  
 $n_c$  Index of refraction for c-line of hydrogen  
 $n_D$  Index of refraction for D-line of sodium  
 $n_F$  Index of refraction for F-line of hydrogen  
 $n_G$  Index of refraction for G-line of hydrogen  
 $n_e$  Index of refraction of extraordinary wave  
 $n_L$  Number of aerial photographs per one itinerary  
 $n_p$  Number of aerial photographs per flight  
 $n_s$  Speed  $\square$  coefficient of turbine



$n_s$	Number of aerial photographs within area S
$n_s$	Number of revolutions per second
$n'$	Index of refraction of medium following the optical system
$n_{\Sigma}$	Total expenditure of aerial photographs for the entire area of photographing ( $S_{\Sigma}$ )
O	Stress in upright of upper zone of framework constructions
O	Central projection of principal point of aerial photograph upon the terrain
$Ox$	Direction of flight velocity
$Ox_1$	Longitudinal axis
$Oy$	Axis of lift force, located within the plane of symmetry of the airplane and perpendicular to $Ox$
$Oy_1$	Normal axis
$Oy_g$	Vertical axis
$Oz$	Axis of lateral force
$Oz_1$	Transversal axis
$o$	Principal point of aerial photograph
$o_p$	Vertex of angles in photo - triangulation
P	Active power
P	Temporary point load; temporary point loading
P	Pressure; force per unit of surface; tension
P	Power
P	Power of radiation
P	Perimeter of theodolite traverse
P	Plane of the negative; picture plane
P	Lift force of airplane

P	Polarization
P	Constant precession
P	North pole
P	Pressure force
P	Concentrated load; point load
P	Point of intersection of plane of aperture stop with the optical axis
P	Thrust of propeller
P	Photometric equivalent
(P)	Momentary rotation center of link; momentary center of velocities
$P_D$	Power of physical dosage
$P_{D_0}$	Power of physical dosage of X-rays on the surface of irradiated medium.
$P_u$	Force of inertia
$P_a$	Momentary center of acceleration of link
$P_a$	Power of radiation of X-rays absorbed by the irradiated medium
$P_f$	Power in Foucault currents; losses by Foucault currents
$P_h$	Power in hysteresis; losses by hysteresis
$P_{hf}$	Power in hysteresis and Foucault current: losses by hysteresis and Foucault currents
(P <sub>j</sub> )	Momentary center of acceleration of link
$P_v$	Momentary center of rotation of link; momentary center of velocities
$P_\lambda$	Power of radiation of X-rays of wave length $\lambda$
$P_o$	Power of radiation of X-rays striking the surface of the irradiated medium

$P_1, P_2, P_3$	Number of kinematic couples of 1st, 2nd, 3rd etc.
etc.	class
$\frac{1}{P}$	Covering capacity
$P'$	Point of intersection of the plane of field stop with the optical axis
$P'$	South Pole
$P_e$	Equatorial horizontal parallax <sup>v</sup> of the moon at median distance from earth
$p$	Temporary distributed load; temporary uniform load
$p$	Horizontal parallax <sup>v</sup> ; longitudinal parallax <sup>v</sup>
$p$	Pressure
$p$	Pressure; force per unit of surface; tension
$p$	Excess pressure
$p$	Area distortion
$p$	Coefficient of formula of magnet interaction on development by power
$p$	Coefficient of Schwartzschild
$p$	Cyclic frequency
$p$	Load per $m^2$ ; specific load
$p$	Pressure
$p$	Parallax <sup>v</sup> of planet
$p$	Perimeter
$p$	Half-perimeter of a triangle
$p$	Distance along the optical axis from object and image to aperture stop
$p$	Uniform load
$p$	Specific pressure; pressure

$p$	Value of one division of the planimeter (absolute)
$(p)$	Momentary center of velocities
$(p)$	Pole of the velocity plane
$(p)$	Pole of a velocity bundle
$p_a$	Absolute pressure
$p_a$	Pole of acceleration plane
$p_a$	Pole of an acceleration bundle
$p_b$	Atmospheric pressure; barometric pressure
$p_e$	Actual value (of measured) pressure
$p_f$	Specific power in Foucault currents; specific losses by Foucault currents
$p_{fv}$	Volumetric power in Foucault currents; volumetric losses by Foucault currents
$p_H$	Atmospheric pressure at altitude $H$
$p_h$	Vacuum; rarefaction
$p_h$	Specific power in hysteresis; specific losses by hysteresis
$p_{hf}$	Specific power in hysteresis and Foucault currents; specific losses by hysteresis and Foucault currents
$p_{hfv}$	Volumetric losses by hysteresis and Foucault currents; volumetric power in hysteresis and Foucault currents
$p_{hv}$	Volumetric losses by hysteresis; volumetric power in hysteresis
$p_i$	Reading of instrument
$(p_j)$	Pole of acceleration plane
$(p_j)$	Pole of acceleration bundle
$p_m$	Limit pressure of instrument

$p_n$	Permissible pressure of instrument
$p_s$	Value of one division of planimeter; expressed in land measures (scalar or relative)
$p_v$	Pole of velocity plane
$p_v$	Pole of velocity bundle
$p'$	Distance along the optical axis from object and image to field stop
$p_\odot$	Equatorial horizontal parallax of the sun at median distance from the earth
$\bar{p}$	Pressure coefficient
$Q$	Principal plane of objective
$Q$	Amount of light
$Q$	Amount of heat
$Q$	Amount of warmth
$Q$	Coefficient of Callier
$Q$	Head resistance
$Q$	Head resistance of airplane
$Q$	Volumetric discharge
$Q$	Intersecting force; transversal force
$Q$	Constant number of polar planimeter
$Q$	Reaction power
$Q$	Force
$Q$	Concentrated load; point load
$Q$	Heat producing capacity; heat value
$Q_u$	Force of inertia
$Q_r$	Tangential resistance force
$(Q_{xy}, Q_{zx}, Q_{zy})$	Centrifugal inertia moments relative to axes XY, ZX, ZY



$q$  Vertical parallax; transversal parallax  
 $q$  Weight of the total amount of fuel and oil  
 $q$  Charge; amount of electricity  
 $q$  Amount of heat  
 $q$  Power of light filter  
 $q$  Angle of parallax  
 $q$  Total distributed load; total uniform load  
 $q$  Distance of perihelion of parabolic orbit from sun  
 $q$  Discharge per unit of flow width  
 $q$  Velocity thrust (dynamic pressure)  
 $q$  Uniform load  
 $q_a$  Weight of aerial navigation equipment  
 $q_e$  Weight of crew  
 $q_f$  Weight of photographic equipment (aerial)  
 $q_n$  Hourly expenditure of fuel and oil  
 $q_1, q_2, q_3 \dots$  Number of kinematic couples of 1st, 2nd, 3rd etc class  
 $R$  Aerodynamic force  
 $R$  Gas constant  
 $R$  Ground pressure; force of ground pressure  
 $R$  Length of arms of polar planimeter  
 $R$  Coefficient of reflection of body; reflective power of body  
 $R$  Magnetic resistance  
 $R$  Reading of limb with "circle right"  
 $R$  Reading of horizontal or vertical circle with vertical circle located to the right  
 $R$  Total reaction of support  
 $R$  Total hydrodynamic force

R	Projection of radius of useful area upon terrain
R	Radius
R	Radius of propeller
R	Radius of veering
R	Resolving power of photographic layer
R	Distance between centers of deflecting and deflected magnets
R	Reaction of support in spatial system; total reaction
$R$	Reaction of support in flat system; total reaction
R	Luminosity; luminousness
R	Force
R	Mean radius of curvature
Re	Reynolds number
$R_u$	Radius of circulation
$R_c$	Resolving power
$R_i$	Radius-vector of earth at moment $t_i$ , wherein $i = 1, 2, 3 \dots$
$R_s$ —	Surface electrical resistance for direct current
$R_t$	Electric resistance of platinum resistance thermometer, at temperature $t$
$R_v$	Rated radius of range of airplane
$R_v$ —	Volumetric electrical resistance for direct current
$R_w$	Actual radius of range of airplane
$R_l$	Length of arms of polar planimeter
$R_\odot$	Geocentric angular radius of the sun
$R$ —	Electric resistance of dielectric for direct current
r	Effective resistance
r	Coefficient of brightness
r	Polar coordinates
r	Polar radius-vector (polar coordinates)
r	Correction of direction for reduction in seconds of arc

$r$  Correction of pitch of micrometer screw per turn  
 (run)  
 $r$  Reduction of zenith distance of planet to meridian  
 $r$  Radius  
 $r$  Radius-vector  
 $r$  Radius-vector of heavenly body  
 $r$  Radius of parallel  
 $r$  Radius of useful area of aerial photograph  
 $r$  Radius of spherical surface  
 $r$  Latent heat of evaporation  
 $r$  Running radius of propeller  
 $r$  Heat of evaporation, for one kilogram  
 (r) Radius of curvature  
 $r_a$  Radius-vector relative <sup>to a</sup> certain point a  
 $r_e$  external radius of a pipe  
 $r_s$  Surface electrical resistance for direct current  
 $r_x, r_y, r_z$  Radii of inertia relative <sup>to</sup> axes X, Y, Z  
 $r$  Electric resistance of dielectric for direct current  
 $r_v$  Volumetric electrical resistance for direct current  
 $\bar{r}$  Relative radius of propeller  
 $S$  Vector of Poynting (power per unit of area)  
 $S$  Greenwich sidereal time  
 $S$  Length of arc, arch, dome  
 $S$  Sidereal mean Greenwich time  
 $S$  Apparent power  
 $S$  Coefficient of reflection  
 $S$  Carrying area of wings



S Total light sensitivity  
 S Period of one half of complete oscillation; duration  
 of pendulum wing  
 S Area  
 S Area covered on terrain by one aerial photograph  
 S Area of diagram  
 S Area of conic connection  
 S Light sensitivity  
 S Sidereal year  
 S Wetted area of boat or float  
 S Static moment of section  
 S Point of south  
 S Stress in rod, general denotation  
 S Center of projection  
 S Center of gravity of link  
 S Entropy  
 (S) Area  
 S<sub>A</sub> Area of coverage, upon terrain, by the useful area of a  
 single set of aerial photographs  
 S<sub>a</sub> Area of coverage, upon terrain, by a single set of  
 aerial photographs  
 S<sub>g</sub> Area of elevator  
 S<sub>g.o</sub> Area of vertical tail group  
 S<sub>z.o</sub> Area of horizontal tail group  
 S<sub>x</sub> Area of keel  
 S<sub>z</sub> Area of rudder  
 S<sub>ch</sub> Area of midship section

$S_{m, \phi}$	Area of midship section of fuselage
$S_{mp}$	Area of trimmer
$S_{cm}$	Area of <sup>s</sup> tabilizer
$S_{u_1}$	Area of flap
$S_{\underline{a}}$	Area of aileron
$S_h$	Strouhal's number
$S_m$	Sidereal mean Greenwich time
$S_N$	Area of photographic of single flight
$S_R$	Area of coverage of terrain by the useful dimensions of the aerial photograph
$S_{\lambda}$	Monochromatic light sensitivity; spectral light sensitivity
$S_{\phi}$	Effective light sensitivity
$S_{\Sigma}$	Area of photographed sector
$S_o$	Greenwich <sup>s</sup> idereal time at mean midnight
$S_o$	Light sensitivity determined by means of conventional- quantity of the difference between density and fog
$\bar{s}$	Length of geodesic line of normal section between two points of spheroid
$s$	Length of arc, arch, dome
$s$	Length of arc of the normal section between two points of spheroid
$s$	Length of path
$s$	Unit of light sensitivity
$s$	Sidereal true time (local)
$s$	Sidereal quasitruetime (local)
$s$	Sidereal mean time (local)
$s$	Local sidereal time

$s$  Modulus of discharge  
 $s$  Area of useful section  
 $s$  Area of one aerial photograph  
 $s$  Path  
 $s$  Path of a point of the link  
 $s$  Distance along the optic axis from point of intersection of incident ray and optic axis to vertex of refracting surface  
 $s$  Gliding, relative  
 $s$  Daily correction of chronometer  
 $s$  Entropy  
 $s$  Entropy of superheated steam  
 $s_a$  Area of rectified set of aerial photographs photographed by means of multiple objective aerial photography apparatus  
 $s_E$  Area of rectified or transformed aerial photograph  
 $s_i$  Useful area of a rectified or transformed aerial photograph  
 $s_m$  Sidereal mean time (local)  
 $s_{qv}$  Sidereal quasitrue time (local);  
 sidereal time (local)  
 $s_r$  Useful area of one aerial photograph  
 $s_v$  Sidereal true time (local)  
 $s_0$  Local sidereal time at mean local midnight  
 $s'$  Distance along optic axis from point of intersection of issuing ray with optic axis to the vertex of refracting surface  
 $s'$  Entropy of a liquid at the moment of incipency of vaporization

s " Entropy of dry saturated steam

T Absolute temperature

T Time (in dimensional formulas)

T Directional joint

T Kinetic force; kinetic energy

T Kinetic force of a system

T Tangential force

T Coefficient of transmission of a body, limited by two parallel planes; transmittance power of a body limited by two parallel planes

T Power in kilograms/seconds

T Intensity of terrestrial magnetic field (total)

T Total length of flight

T Period

T Period of magnet swing

T Period of oscillation

T Period of revolution of heavenly body around the sun

T Period of one half of a complete oscillation; duration of a pendulum swing

T Plane of terrain; object plane

T Clock reading

T Shearing force

T Braking force

T Temperature, measured from  $0^{\circ}\text{K}$  (absolute scale).

T Tropical year

(T) Kinematic force; kinematic energy

T - T Line of base, line of intersection of picture plane with plane of object

$T_A$	Time required for descent from altitude H to the airdrome
$T_B$	Time expended per one approach
$T_C$	Color temperature
$T_D$	Time of flight over distance D
$T_f$	Photographing time of one flight
$T_H$	Time of gaining altitude H
$T_i$	Zone time
$T_L$	Time expended on laying one photographic itinerary
$T_R$	Time of flight over distance R
$T_r$	Radiation temperature
$T_S$	Time, expended on photographing area S
$T_s$	Black temperature, luminosity temperature
$T_s$	Black temperature of source
$T_w$	Time expended on determination of aerial navigation elements; chronometric timing
$T_Z$	Total expenditure of flight hours
$T_0$	Universal time
$T_0$	Greenwich civil time; universal time
$T_1, T_2 \dots$	Local civil (zone) time of first, second, etc. zone
$T^\circ$	Absolute temperature; absolute temperature of air
$T'$	Directional angle on plane
$t$	Time
$t$	Time of illumination of photograph; exposure
$t$	Temperature; centigrade temperature
$t$	Temperature of the air
$t$	Temperature measured from $0^\circ\text{C}$ (international centigrade scale)
$t$	Temperature <sup>by</sup> <del>of</del> scale C.
$t$	Accuracy of vernier (nonius)
$t$	Hourly angle



$t$	Hourly angle of planet
$t_A$	Temperature of aneroid
$t_A^\circ$	Temperature of air at airdrome
$t_{np}$	Time of development
$t_{gr}$	Temperature gradient
$t_H^\circ$	Temperature of air at altitude H
$t_o$	Period of induction
$t_p$	Temperature, measured - using scale of a gas thermometer of constant volume ( $v=const$ )
$t_v$	Temperature, measured using scale of a gas thermometer of constant pressure ( $p=const$ )
$t_w$	Time of run of sighted terrain point in determining ground speed
$t_Z^\circ$	Temperature of air at altitude Z
$t_\Sigma$	Total time of illumination; total exposure
$t_o^\circ$	Temperature at sea level
$t_\odot$	True solar time (local)
$t^\circ$	Temperature
$t^\circ$	Temperature of air
U	Internal energy
U	Expression $\frac{\tan(45^\circ + 0.5\varphi)}{\tan^\epsilon(45^\circ + 0.5\varphi)}$
U	Contrast of object
U	Correction of clock relative to Greenwich time
U	Potential energy; expansible energy
U	Force function
U	Wind velocity

U Stress in upright of lower zone of framework  
 U Energy  
 (U) Momentary acceleration center of link  
 (U) Pole of acceleration plane  
 (U) Pole of acceleration bundle  
 (U) Energy  
 u Argument of latitude  
 u Internal energy  
 u Internal energy of superheated steam  
 u Correction of clock relative local time  
 u Corrected latitude  
 u Difference of potentials  
 u Velocity  
 u Velocity of rise (vertical) of an airplane  
 u Electric voltage  
 (u) Linear velocity  
 (u) Perimeter  
 (u) Electromotive force  
 u' Internal energy of a liquid at the moment of in-  
 ciency of vaporization  
 u'' Internal energy of dry saturated steam  
 V Visibility  
 V Aerial velocity of airplane (relative to medium)  
 V Expression:  $\sqrt{1+e'^2 \cos^2 \varphi}$   
 V Total amount of water in volumetric units (flowing

through turbine or hydrostation over a certain interval  
of time)

$V$	Volume
$V$	Forward vertex focal distance
$V$	Reaction of support; vertical component
$V$	Velocity of flight
$V$	Velocity of flow
$V$	Stress in pillar of framework
$V - V$	Projection of direction of principal vertical upon terrain
$(V)$	Velocity of point of link
$V_e$	Economic speed of airplane
$V_{\underline{x}}$	Cruising speed
$V_{\underline{x}u}$	Critical velocity
$V_{\underline{x}uic}$	Cruising speed
$V_{\underline{H}}$	Optimum horizontal velocity on gaining altitude
$V_{\underline{omfL}}$	Velocity at breaking contact with water
$V_{\underline{noc}}$	Velocity at landing
$V_{\underline{yl}}$	Speed of development
$V_{\max}$	Maximum velocity of horizontal fight (at all altitudes of flight
$V_{\max}$	Maximum velocity of airplane
$V_{\min}$	Landing velocity of airplane (minimum)
$V_u$	Optimum velocity of airplane
$V_y$	Vertical velocity
$V_{\lambda}$	Visibility of monochromatic light
$V_1$	Forward vertex refraction of lens



$V_2$  Rear vertex refraction of lens  
 $v$  True anomaly  
 $v$  Linear velocity  
 $v$  Volume of superheated steam  
 $v$  Distance from forward vertex to forward focus;  
 $v$  forward vertex focal distance  
  
 $v$  Velocity  
 $v$  Velocity of a point of the link  
 $v - v$  Direction of principal vertical on aerial photograph  
 $v_{BA}$  Velocity of motion of point B relative to point A  
of the same link  
  
 $v_j$  Speed of motion of film in rewinding  
 $v_h$  Velocity of liquid in ascending pipe  
 $v_s$  Velocity of liquid in suction pipe  
 $v_o$  Velocity of water flow at dam  
 $v_{o\max}$  Maximum ground speed of horizontal flight  
 $v_{21}$  Velocity of second link relative to first in forward motion (forward couple - 2, 1)  
  
 $v'$  Rear vertex focal distance  
 $v'$  Volume of liquid at moment of incipency of vaporization  
  
 $v''$  Volume of dry saturated steam  
 $W$  Expression:  $\sqrt{1 - e^2 \sin^2 \varphi}$   
  
 $W$  Hydrodynamic resistance  
 $W$  Complex potential  
 $W$  Moment of resistance  
 $W$  Volume of water in reservoir

W	Ground speed of airplane (relative to the ground)
W	Work
W	Wind velocity; flow velocity
W	Point of West
W	Number of order of freedom of mechanism
W	Energy
W	Energy of radiation of X-rays, passing through given area over given time
(W)	Work
$W_a$	Energy of radiation of X-rays, absorbed by the ir- radiated medium
$W_\lambda$	Energy of radiation of X-rays of wave length $\lambda$
$W_0$	Energy of radiation of X-rays striking a given area of irradiated medium
$W_\infty$	Velocity of flow at a distance from body
w	Complex potential
w	Relative humidity in percent
w	Density of magnetic energy
w	Work
w	Velocity
w	Number of turns of winding
(w)	Linear velocity
$w_{max}$	Maximum density of magnetic energy
X	Reaction of support in spatial system; component reaction along coordinate axis
X	Northern component of intensity of terrestrial field
X	Force by flight velocity
X	Magnification, axial

$X, Y, Z$	Rectangular geocentric equatorial coordinates of the sun
$X_t$	Tangential force
$x$	Vapor content of mixture
$x$	Distance along optic axis from object and image to forward (principal) focus
$x$	Reactance
$x, y$	Coordinates of a point of an aerial photograph depending upon the direction of projections of coordinate axes of terrain upon plane of the photograph
$x, y$	Plane coordinates of terrain point
$xy$	Plane of flow
$x, y$	Rectangular coordinates
$x, y, z$	Cartesian coordinates
$x, y, z$	Rectangular heliocentric equatorial coordinates of heavenly bodies
$xz$	Plane of sliding
$x, z$	Coordinates of a point of an aerial photograph depending upon the direction of projections of coordinate axes of terrain upon plane of the photograph
$x_p$	Coordinate of center of pressure
$x_{rc}$	Coordinate of center of rigidity
$x_m$	Coordinate of center of gravity
$x_1 y_1$	Plane of symmetry
$x_1 z_1$	Principal plane; plane of wings
$x'$	Distance along optic axis from object and image to rear (principal) focus
$Y$	Eastern component of intensity of terrestrial field
$Y$	Hydrodynamic lift force
$Y$	Lift force

$Y$  Transversal linear magnification  
 $Y$  Distance from point to optic axis  
 $Y$  Reaction of support in spatial system; component of  
 reaction along coordinate axis  $Y$ .  
 $Y$  See  $X$ ,  $Y$ ,  $Z$ .  
 $Y_\lambda$  Density of intensity in spectrum  
 $y$  Total conductivity  
 $y$  Distance of neutral axis of section from terminal com-  
 pressed thread  
 $y$  See  $x$ ,  $y$ ,  $z$ .  
 $yz$  Front plane  
 $y_1$  Normal force  
 $y_1 z_1$  Transversal plane  
 $y'$  Distance from image to optic axis  
 $Z$  Absolute altitude of airplane (above sea level)  
 $Z$  Lateral force  
 $Z$  Altitude coordinate of terrain point  
 $Z$  Vertical component of intensity of terrestrial field  
 $Z$  Zenith  
 $Z$  Location of zero point  
 $Z$  Reaction of supports in spatial system; component of  
 reactions along coordinate axis  $Z$   
 $Z$  See  $X$ ,  $Y$ ,  $Z$ .  
 $Z_t$  Location of zero point following temperature  $t$ , in  
 thermometer which had been subjected to ageing  
 $Z_1$  Transversal force  
 $Z'$  Nadir  
 $z$  Zenith distance

$z$  Zenith distance of planet  
 $z$  Total resistance  
 $z$  Location of zero point  
 $z$  See  $x, y, z$ .  
 $z_m$  Zenith distance of planet in median  
 $z_t$  Location of zero point after temperature  $t$

## 2. Greek Alphabet

$\alpha$  Directional angle in plane  
 $\alpha$  Coefficient of concentration  
 $\alpha$  Coefficient of Coriolis  
 $\alpha$  Coefficient of linear expansion  
 $\alpha$  Coefficient of absorption  
 $\alpha$  Coefficient of heat emission  
 $\alpha$  Coefficient of propeller thrust  
 $\alpha$  Coefficient of electric resistance (temperature)  
 $\alpha$  Constant of phase displacement  
 $\alpha$  Right ascension of planet.  
 $\alpha$  Oblate of terrestrial spheroid  
 $\alpha$  Angle amplitude of magnet oscillation  
 $\alpha$  Angle of attack of wing  
 $\alpha$  Angle of inclination  
 $\alpha$  Angle of inclination, relative to optic axis, of entering ray  
 $\alpha$  Angle of deviation of optic axis of photographic apparatus from the vertical.  
 $2\alpha$  Angle of cone



$[\alpha]$	Rotation power of liquid (basic denotation with parentheses)
$(\alpha)$	Rotation power of body (basic denotation with parentheses)
$[\alpha]$	Specific rotation power of dissolved body (basic denotation with parentheses)
$\alpha, \beta, \gamma$	Angles
$\alpha, \beta, \gamma'$	Plane angles
$\alpha_A$	Temperature coefficient of aneroid
$\alpha_A$	Angle of attack CAX
$(\alpha_b)$	Coefficient of propeller thrust
$\alpha_u$	True angle of attack
$\alpha_M$	Given magnetic travel angle
$\alpha_{\cancel{M}}$	Temperature coefficient of development
$\alpha_i$	Temperature coefficient of instrument
$\alpha_N$	Given true travel angle
$\alpha_x$	Transversal bank
$\alpha_x$	Projection of angle $\alpha$ upon coordinate plane ZOY
$\alpha_y$	Latitudinal inclination
$\alpha_y$	Projection of angle $\alpha$ upon coordinate plane ZOX
$\alpha_z$	Projection of angle $\alpha$ upon coordinate plane XOY
$\alpha_0$	Angle of attack at $C_y = 0$
$\alpha'$	Angle of inclination, relative to optic axis, of issuing ray.
$\beta$	Interval <sup>n</sup> angle of transversal careening at stop
$\beta$	Coefficient of propeller power
$\beta$	Coefficient of volumetric expansion
$\beta$	Coefficient of contrast loss.

$\beta$	Plane angle
$\beta$	One half of true field of vision
$\beta$	Constant of attenuation
$\beta$	Anti-capotage angle
$\beta$	Angles (See $\alpha, \beta, \gamma$ )
$\beta$	Angle of bank of airplane wings
$\beta$	Angle formed by optical axis of the objective of an aerial photographic apparatus with the sighting ray
$\beta$	Angle of flow direction with profile of propeller blade, measured within plane of rotation
$\beta$	Angle of sliding
$\beta$	Latitude of planet
$2\beta$	True field of vision
$(\beta_e)$	Coefficient of propeller power
$\beta_M$	Actual magnetic travel angle
$\beta_N$	Actual true travel angle
$\beta_x$	Projection of angle $\beta$ upon plane ZOY
$\beta_y$	Projection of angle $\beta$ upon plane ZOX
$\beta_z$	Projection of angle $\beta$ upon plane XOY
$\beta'$	External angle of transversal careening at stop
$\beta'$	One half of apparent field of vision
$2\beta'$	Apparent field of vision
$\Gamma$	Intensity of vortex line; intensity of vortex
$\Gamma$	Velocity circulation
$\gamma$	Weight of unit of volume
$\gamma$	Coefficient of contrast
$\gamma$	Coefficient of volumetric expansion
$\gamma$	Plane angle (see $\alpha, \beta, \gamma$ )
$\gamma$	Error of instrument reading

$\gamma$	Constant of wave propagation
$\gamma$	Specific conductivity
$\gamma$	Convergency of meridians within plane
$\gamma$	Point of vernal equinox
$\gamma$	Specific weight
$\gamma$	Angle of convergence
$\gamma$	Angle of bank
$\gamma$	Angle of displacement; relative displacement
$\gamma$	Center angle
$(\gamma)$	Volumetric weight
$(\gamma)$	Relative weight
$\gamma_K$	Compass course
$\gamma_M$	Magnetic course
$\gamma_0$	Volumetric weight
$\gamma_{05}$	Volumetric weight
$\gamma_{0n}$	Reactive weight
$\gamma_4$	Specific weight
$\gamma_{max}$	Maximum coefficient of contrast
$\gamma_N$	True course
$\gamma_n$	Tolerance
$\gamma_s$	Convergence of meridians on spheroid
$\gamma_s-$	Specific surface electric conductivity for direct current
$\gamma_v-$	Specific <del>volumetric</del> volumetric electrical conductivity for direct current
$\gamma_w$	Progress course
$\gamma_0$	Theoretically normal magnitude of acceleration (intensity) of gravitation force, reduced to surface of computation



$\chi_1$	Angle of longitudinal careening of the portion between stops
$\chi_2$	Angle of longitudinal careening of stern portion
$\chi_\infty$	Limit coefficient of contrast
$\Delta$	Compass variation
$\Delta$	Height of roughness protuberances
$\Delta$	Geocentric distance of planet in astronomical units
$\Delta$	Brightness detail
$\Delta$	Load on water
$\Delta$	Optic interval
$\Delta$	Optical difference of paths of two rays
$\Delta$	Relative length of rod
$\Delta$	Ratio of air density at altitude to air density at the ground
$\Delta$	Error (of line lengths, Location of points, values of angles)
$\Delta$	Spatial changes of elements of terrestrial magnetism
$\Delta$	Layer of one-half reduction
$\Delta$	Angle of twist of thread
$\Delta_\kappa$	Compass deviation
$\Delta_M$	Magnetic declination
$\Delta_\phi$	Photographic brightness detail
$\Delta_{i,j}$	Mutual distance of two heavenly bodies of mass $m_i$ and $m_j$ respectively
$\Delta_i$	Geocentric distance of heavenly body at moment $i$
$\Delta_v$	Lack of sharpness due to flight velocity
$\Delta B$	Difference of geodesic latitudes

$\Delta D$	Interval of density of photographic reproduction
$\Delta D_g$	Useful density interval
$\Delta g$	Anomaly of acceleration (intensity) of gravitation force, with reduction, in free air ( if required taking into account topographic correction)
$\Delta H$	Correction for flight altitude (summative)
$\Delta h$	Altitudinal error of closure in leveling traverse (direct and reverse)
$\Delta L$	Difference of geodesic longitudes
$\Delta l$	Absolute elongation; absolute longitudinal deformation on stretching
$\Delta \ell$	Absolute contraction; absolute longitudinal deforma- tion on compression
$\Delta P$	Linear error of closure of perimeter of theodolite traverse
$\Delta p$	Excess pressure
$\Delta Q$	Error of closure in angles of theodolite traverse
$\Delta_h R$	Linear distance on terrain corresponding to the linear displacement on the aerial photograph due to relief
$\Delta_{h'} r$	Linear displacement on aerial photograph due to relief
$\Delta S$	Error of closure in area by comparison with result of area computation
$\Delta \epsilon$	Nutation in inclination
$\Delta \lambda$	Difference of geographic longitudes (astronomic)
$\Delta \varphi$	Difference of geographic latitudes (astronomic)
$\Delta \psi$	Nutation in longitude

$\delta$	Variations in time of elements of terrestrial magnetism
$\delta$	Detail of blackening
$\delta$	Coefficient of quenching ( in time )
$\delta$	Coefficient of movement variation
$\delta$	Coefficient of formula of Callendara, used as criterion of quality of platinum
$\delta$	Error in distance between bisectors of micrometer hair lines (in angular measurements)
$\delta$	Correction for curvature in reproduction of geodesic line
$\delta$	Phase difference of two oscillations
$\delta$	Reduced thickness of lens
$\delta$	Deviation of magnetic needle
$\delta$	Declination of planet
$\delta$	Thickness of wall etc.
$\delta$	Thickness of wall of pipes, vessels etc.
$\delta$	Angle of dielectric losses
$\delta$	Angle of deflection of flight controls
( $\delta$ )	Absolute elongation; absolute longitudinal deformation on stretching
( $\delta$ )	Absolute contraction; absolute longitudinal deformation on compression
( $\delta$ )	Relative elongation
( $\delta$ )	Thickness of wall; board; side of metal beam etc. (dimensions of transversal sections and their elements)
$\delta_e$	Angle of deflection of elevator
$\delta_{\kappa}$	Compass direction of wind

$\delta_M$	Magnetic direction of wind
$\delta_H$	Angle of deflection of rudder
$\delta_E$	Angle of deflection of aileron
$\delta_N$	True direction of wind
$\delta_\mu$	Reduction drop
$\delta_r$	Reduction drop
$\delta_i a, \delta_i e, \delta_i \Omega$	Disturbances of elements $a, e, \Omega$ , of order $i$ relative to the disturbing masses
$\epsilon$	Dielectric permeability; dielectric constant
$\epsilon$	Coefficient of gliding
$\epsilon$	Coefficient of integral radiance
$\epsilon$	Coefficient of porosity
$\epsilon$	Coefficient of compression
$\epsilon$	Inclination of plane of equator relative to plane of ecliptic
$\epsilon$	Relative elongation; relative longitudinal deformation on stretching
$\epsilon$	Relative contraction; relative longitudinal deformation on compression
$\epsilon$	Constant of magnetometer
$\epsilon$	Spherical excess of triangle
$\epsilon$	Angular acceleration
$\epsilon$	Angular acceleration of link
$\epsilon$	Angle of wind
$\epsilon$	Angle of deflection of light ray by prism
$\epsilon$	Angle of flow taper
$\epsilon_c$	Coefficient of color radiation

$\epsilon_\lambda$	Coefficient of monochromatic radiation of wave length $\lambda$
$\epsilon_0$	Angle of least deflection of light ray by prism
$\epsilon_{21}$	Angular acceleration of second link relative to first
$\xi$	Rectangular geocentric equatorial coordinates of heavenly bodies (see $\xi, \eta, \zeta$ )
$\zeta$	Component of deviation of vertical line along meridian
$\eta$	Coefficient of useful effect
$\eta$	Coefficient of useful effect of airscrew
$\eta$	Coefficient of taper of wing
$\eta$	Mechanical coefficient of useful effect
$\eta$	The perpendicular to the meridian component of vertical line deviation by longitude
$\eta$	Location of center of gravity in altitude
$\eta$	Rectangular geocentric equatorial coordinates of heavenly bodies (see, $\xi, \eta, \zeta$ )
$\eta$	Time equation
$\eta$	Cartesian coordinates ( See $\xi, \eta, \zeta$ )
( $\eta$ )	Dynamic viscosity coefficient
(H)	Precession from planets
(H)	Angular element of centering
(H)	Angle of attack(of incidence) of airplane wings
(H)	Angle of diffraction reflection
(H)	Angle of deviation of magnet
(H)	Hourly angle
(H)	Angle of diffraction image of n-th order
( $\Theta$ )	Temperature measured from 0°K (absolute scale); absolute temperature.



$(\Theta_x)$	Moment of inertia relative to axis X
$(\Theta_{xy},$	Centrifugal moments of inertia relative to axes XY, ZX,
$\Theta_{yz}, \Theta_{zy})$	ZY.
$\Theta_1$	Angular element of reduction
$\theta$	Linear angle of twist
$\theta$	Polar angle, ( <sup>polar</sup> coordinates)
$\theta$	Refraction angle of prism
$\theta$	Angle of flight trajectory with horizon
$(\theta)$	Temperature measured from 0° C ( International centi- grade scale)
$\vartheta$	Polar coordinates
$\vartheta$	Angle of pitching
$(\vartheta)$	Temperature
$(\vartheta)$	Angular acceleration
$\kappa$	Coefficient of propeller moment
$\kappa$	Magnetic and electric susceptibility
$\kappa$	Rotation of negative within its plane around optical axis
$\kappa$	Index of light quenching
$\kappa$	Angle of sweepback
$\kappa'$	Index of absorption
$\lambda$	Vertical angle of sighting
$\lambda$	Geographic longitude (astronomical)
$\lambda$	Flexibility
$\lambda$	Wave length
$\lambda$	Wave length in vacuo
$\lambda$	Length of light wave

$\lambda$	Longitude of point of observation
$\lambda$	Longitude of planet
$\lambda$	Longitude of point of earth surface measured from Greenwich
$\lambda$	Coefficient of Darcy-Weisbach
$\lambda$	Coefficient of propeller speed; relative pitch of propeller
$\lambda$	Coefficient of thermal-conductivity; thermal conductivity
$\lambda$	Aspect ratio of wetted surface
$\lambda$	Aspect ratio of wings
$\lambda_c$	Length of light wave of C-line of hydrogen
$\lambda_D$	Length of light wave of D-line of sodium
$\lambda_e$	Effective wave length
$\lambda_e$	Active wave length
$\lambda_{eff}$	Effective wave length; equivalent wave length
$\lambda_F$	Length of light wave of F-line of hydrogen
$\lambda_{G'}$	Length of light wave of G'-line of hydrogen
$\lambda_g$	Wave length corresponding to limit of absorption of X-rays
$\lambda_{max}$	Wave length, corresponding to maximum intensity density in continuous spectrum of X-rays
$\lambda_o$	Limit, least wave length in continuous spectrum of X-rays, in vacuo
$\lambda_{21}$	Ratio of second link length to length of first link
$\mu$	Annual proper motion of star along great circle
$\mu$	Dynamic viscosity coefficient
$\mu$	Reinforcement coefficient
$\mu$	Coefficient of viscosity

$\mu$	Coefficient of reduction
$\mu$	Coefficient of gliding; inverse efficiency
$\mu$	Coefficient of <sup>P</sup> Poisson
$\mu$	Coefficient of discharge
$\mu$	Magnetic permeability
$\mu$	Scale
$\mu$	Molecular weight
$\mu$	Temperature coefficient of magnetic moment
$\mu$	Value of one division of micrometer knob in seconds
$(\mu)$	Coefficient of strength margin
$\mu_A$	Individual linear scale
$\mu_a$	Initial magnetic permeability
$\mu_d$	Differential magnetic permeability
$\mu_e$	Effective permeability; active permeability
$\mu_{max}$	Maximum magnetic permeability
$\mu_r$	Reversible magnetic permeability
$\mu_\alpha$	Proper motion of star in right ascension annual
$\mu_\Delta$	Magnetic permeability in individual cycle; mean magnetic permeability
$\mu_\delta$	Proper motion of star in inclination, annual,
$\mu_\gamma$	Moment of bank
$\mu_o$	Magnetic permeability of body
$\nu$	Induction coefficient of magnet
$\nu$	Kinematic coefficient of viscosity
$\nu$	Coefficient of dispersion
$\nu$	Frequency of oscillations
$\nu$	Number of oscillations per second
$\nu$	Coefficient of <sup>P</sup> Poisson



$\nu$	Frequency
$\nu_E$	Angle formed by principal planes of objective with plane of screen E
$\nu_P$	Angle formed by principal planes of objective with plane of negative
$\nu_0$	Limiting highest frequency of oscillations in continu- ous spectrum of X-rays
$\xi$	Location of center of gravity in length
$\xi, \eta, \zeta$	Rectangular geocentric equatorial coordinates of heavenly bodies
$(\xi, \eta, \zeta)$	Cartesian coordinates
$\Pi$	Potential energy; expansible energy
$\pi$	Annual parallax of star
$\pi$	Longitude of perihelion
$\pi$	Proportionality of rendition, expressed by ratio of latitude of photographic paper to gradation
$\rho$	Internal heat of evaporation, relating to one kilogram
$\rho$	Horizontal angle of sighting
$\rho$	Metacentric radius
$\rho$	Volumetric density of charge
$\rho$	Density
$\rho$	Air density
$\rho$	Polar radius-vector (polar coordinates)
$\rho$	Radius-vector of point of earth surface, expressed in parts of major half axis of terrestrial spheroid
$\rho$	Radius of inertia of link
$\rho$	Radius of curvature
$\rho$	Refraction

$\rho$	Specific resistance
$(\rho)$	Polar coordinates
$\rho_A$	Radius of curvature of normal section of azimuth A
$\rho'_B$	Metacentric transversal radius
$\rho_i$	Reduced geocentric distance of heavenly body
$\rho_K$	Compass bearing
$\rho_L$	Metacentric longitudinal radius
$\rho_M$	Magnetic bearing
$\rho_N$	True bearing
$\rho_{s-}$	Specific surface electric resistance for direct current
$\rho_{v-}$	Specific volumetric electrical resistance for direct current
$\rho_0$	Density of air at ground
$\bar{\rho}$	Ratio of air density at altitude to air density at ground
$\sigma$	Coefficient of haze
$\sigma$	Coefficient of scattering (magnetic)
$\sigma$	Normal voltage
$\sigma$	Surface density of charge
$\sigma$	Constant of equation (law) of Stefan-Boltzmann
$\sigma$	Reduction to ecliptic
$\sigma$	Angle expression of arc of terrestrial spheroid
$\sigma$	Specific magnetization
$\sigma$	Portion of reduction coefficient, determined by means of the correlation: $\sigma = \mu - \tau$
$\sigma_{\underline{n}}$	Limit of strength; temporary resistance
$(\sigma_{\underline{n}})$	Limit of proportionality

$\sigma_{np}$	Limit of proportionality
$\sigma_{nu}$	Limit of proportionality
$\sigma_{nx}$	Limit of durability; temporary resistance
$\sigma_T$	Yield point
$\sigma_m$	Yield point
$\sigma_y$	Limit of elasticity
$\sigma_{yn}$	Limit of elasticity
$(\sigma_B)$	Limit of strength; temporary resistance
$\sigma_K$	Limit of durability for asymmetric cycles
$\sigma_u$	Portion of reduction coefficient, determining the energy of emission electrons
$\sigma_1$	Limit of durability for symmetric cycles
$\tau$	Interval between two consecutive aerial photographs
$\tau$	Tangential stress
$\tau$	Coefficient of transmittance of absorber
$\tau$	Coefficient of transmission
$\tau$	Linear density of charge
$\tau$	Moment of passage of heavenly body through perihelion
$\tau$	Constant of time
$\tau$	Specific friction force
$\tau$	Angle of deflection of trimmer
$\tau$	Value of division of level in seconds of arc
$\tau$	Part of year from moment of beginning of fictitious year of Bessel
$\tau$	Portion of reduction coefficient, determined by the photo effect
$(\tau)$	Time
$\tau_s$	Angle of deflection of trimmer of elevator

$\tau_{\mu}$	Angle of deflection of trimmer of rudder
$\tau_{\alpha}$	Angle of deflection of trimmer of aileron
$\tau_{\lambda}$	Coefficient of transmission, of light of wave length $\lambda$ , of absorber
$\Phi$	Magnetic flux
$\Phi$	Potential of velocities
$\Phi$	Light flux
$\Phi$	Thermal flux
$\Phi$	Thermodynamic potential
$\varphi$	Geographic latitude (astronomical)
$\varphi$	Geographic latitude of a point of earth surface
$\varphi$	Coefficient of retardation of discharge
$\varphi$	Coefficient of built-up degree
$\varphi$	Coefficient of longitudinal buckling
$\varphi$	Coefficient of velocity
$\varphi$	Initial phase of oscillation
$\varphi$	Polar angle (polar coordinates)
$\varphi$	Potential of velocities
$\varphi$	Difference of phases of voltage and current; phase displacement between current and voltage
$\varphi$	Thermodynamic potential
$\varphi$	Angular or arc displacement
$\varphi$	Angle of internal friction in free-flowing materials
$\varphi$	Angle of longitudinal trim
$\varphi$	Angle of natural slope
$\varphi$	Angle of link rotation
$\varphi$	Angle of section rotation
$\varphi$	Angle of taper

$\varphi$	Angle of friction
$\varphi$	Angle of setting; inclination of blade section relative to plane of rotation
$\varphi$	Angle of eccentricity of elliptic orbit
$\varphi$	Latitude of observation point
$\varphi$	Electric potential
$(\varphi)$	Initial phase
$(\varphi)$	Polar coordinates
$\varphi_m$	Mean geographic latitude (astronomical)
$\varphi_0$	Initial angle of longitudinal trim
$\varphi'$	Geocentric latitude
$\varphi'$	Geocentric latitude of a point of earth surface
$\chi$	Coefficient of propeller moment
$\chi$	Wetted perimeter
$(\chi_f)$	Coefficient of propeller moment
$\Psi$	Flux of electrical induction; flux of displacement elec- tricity
$\Psi$	Function of current
$\Psi$	Magnetic flux
$\psi$	Internal heat of evaporation, for 1 kilogram
$\psi$	Initial phase
$\psi$	General precession
$\psi$	Angle within plane P formed by the direction of the principal vertical with the axis of X's
$\psi$	Angle of drifting
$\psi$	Angle of transversal V
$\psi$	Angle of travel



$\psi$	Function of current
$\psi_A$	Angle within the horizontal plane (T or E) formed by the projection of the principal vertical with the direction toward certain point A
$\psi_a$	Angle within plane P, formed by the direction of the principal vertical with the direction toward certain point a.
$\psi_0$	Angle within the horizontal plane (T or E) formed by the projection of the principal vertical with the axis of X' <del>Y</del> <sup>S</sup>
$\psi'$	Lunisolar precession
$\Omega$	Full contrast
$\omega$	Cyclic frequency
$\omega$	Area of useful section
$\omega$	Limit of distortion of angle
$\omega$	Solid angle
$\omega$	Angle velocity
$\omega$	Angle velocity of link
$\omega$	Angular frequency
$\omega$	Angular distance from perihelion <sup>helion</sup> to ascending node
$\omega$	Angle of lead
$\omega$	Clock movement
$\omega_{21}$	Angular velocity of second link relative to first

### 3. Cyrillic alphabet

$\Theta$  Specific energy of section

### 4. <sup>Nu</sup> Numerical Denotations.

1, 2, 3...k,...n

Numbers of links

(1,2), (2,3)

Kinematic couples

(1-2, 2-3...)

Kinematic couples

## 5. Conventional signs



Longitude of ascending node

Osculatory element of epoch  $t_0$  (See  $a_0, e_0, \Omega_0$ )

Point, astronomically determined



Point of the vernal equinox



Point of geodesic base of trigonometric grid (accompanied by a mark)



Point, camera photogrammetric (orientation)



Point, field photogrammetric (orientation)



Point of relief (accompanied by a mark)



Standard exposure of photographic paper

## Part III

Mathematic denotations (Basic) Ost 573

(1931 Edition)

## I. Denotation of numbers.

The numerals of a multinomial whole number are divided into groups of three from right to left, the groups being separated by intervals; for example: 1 411 312.

A decimal fraction is separated from the whole portion by a comma; in the absence of whole portion its place is taken by a

zero. In the case when the decimal numbers are numerous they are divided into groups of three, from left to right, by means of intervals; for example: 13, 595 93.

In denotations of ordinary fraction there is used a horizontal line; for example:  $\frac{7}{22}$

Note: To facilitate printing a slanted line is permissible, if its use is not misleading.

In a mixed number the proper fraction is written immediately following the whole portion; for example  $7\frac{2}{3}$

% - percent

o/oo - per mill

Positive nature of a number is not denoted by a sign, excepting those cases where this must be indicated; in these instances the sign + (plus) precedes it; for example : + 5.

The negative nature of a number is denoted by its being preceded by the sign - (minus); for example: - 5.

The absolute value of a number is denoted by two vertical lines; for example:  $|-5|$

## II. Denotation of correlations

=	Equals
≡	Identical or identically equals (used in cases where it is desirable specifically to note identity of both members of the equation
≠	Is not equal
≈	Approximately equals



$<$	Is less than
$>$	Is greater than
$\leq$	Is less than or equals (is not greater than)
$\geq$	Is greater than or equals (is not less than)
$\ll$	Is small in comparison with
$\gg$	Is large in comparison with

### III Denotation of Basic Operations

$+$	(plus) addition
$-$	(minus) subtraction
$\cdot$ or $\times$	Multiplication

The multiplication sign is usually not placed before a number denoted by a letter or before parentheses.

$:$ or $\frac{\quad}{\quad}$	Division
$a^m$	<i>a to the m power</i>
$\sqrt{\quad}$	Square root of
$i$	Square root of $-1$ ; $i = \sqrt{-1}$
$\sqrt[m]{\quad}$	m-th root of, with $m \neq 2$
$\log_b$	Logarithm to the base b

Note: In those instances where it is not necessary to indicate the base, the corresponding subindex of log is omitted.

lg	logarithm to the base 10 (common or decimal logarithm)
ln	Logarithm to the base $e = 2.718\ 28\dots$ (natural logarithm)

To denote the power of a logarithm the exponent of the power is written next to the logarithm sign, for example:  $\log_b^2 a$ .

( )	Parentheses	} enclosing marks
[ ]	Brackets	
{ }	Braces	

## IV Geometric denotations

$\perp$  Perpendicular to

$\parallel$  Parallel to

$\equiv$  Equal and parallel to

$\sim$  Similar to

$\triangle$  Triangle; for example:  $\triangle ABC$

$\angle$  Plane angle; for example:  $\angle ABC$

Note: In those cases where misunderstandings may arise, the angle may be denoted by the more complex sign  $\sphericalangle$

$\frown$  or

$\smile$  arc; for example:  $\smile AB$ ,  $\frown AB$

$^{\circ}$	Degree	} In denoting values of plane angle or arc;
'	Minute	
"	Second	

If the denotation  $^{\circ}$ (degree), '(minute) or "(second) relates to a number including a decimal fraction, it is written above the comma; for example:  $3^{\circ},41$ ;  $6^{\circ}5',27$ ;  $8^{\circ}4',2",9$ .

$\pi$  Ratio of length of circumference to the diameter;  
 $\pi = 3,141\ 59\dots$

## V. Denotations of trigonometric and hyperbolic functions

sin	sine
cos	cosine
tg	tangent
ctg	cotangent
sec	secant
cosec	cosecant

To denote the power of a trigonometric function the exponent of power is written above the sign of this function; for example:  $\sin^2 \chi$ .

To denote inverse trigonometric functions the above indicated denotations are preceded by arc (arcus-arc): for example: arc  $\sin \chi$  - arc the sine of which is equal to  $\chi$ .

arcsin	arcsine
arccos	arccosine
arctg	arctangent
arcctg	arccotangent

#### Hyperbolic functions:

sh	hyperbolic sine
ch	hyperbolic cosine
th	hyperbolic tangent
cth	hyperbolic cotangent

To denote the power of a hyperbolic function the exponent of power is written above the sign of this function; for example:  $sh^2 \chi$ .

To denote inverse hyperbolic functions the above indicated denotations are preceded by Ar (area-); for example:  $\text{Arsh } u$  - an area. The corresponding hyperbolic sine of which is equal to

Arsh	hyperbolic arsine
Arch	hyperbolic arcossine
Arth	hyperbolic artangent
Arcth	hyperbolic arcotangent

# VI Mathematical Analysis Denotations

Constant numbers are denoted mostly by the first letters of the latin alphabet; for example: a, b, c...

Variable numbers are denoted mostly by the last letters of the latin alphabet; for example: x, y, z, u...

Function of one or several variables is denoted by one of the signs:  $f( )$ ,  $\varphi( )$ ,  $\Phi( )$ ,...

for example:  $f(x)$ ,  $f(x, y, z)$ :

const	constant
$\infty$	infinity
lim	limit
$\rightarrow$	approaches: for example: $x \rightarrow a$ , $(\lim_{x \rightarrow 0} \frac{1}{x}) = e$
$\Delta$	increase of
$d$	differential
$\delta$	variation
' " "" }	denote successive derivatives of single variable
IV V }	function; for example: $f'(x)$ , $y'$ , $f^{IV}(x)$ , $y^V$

## Notes:

1. If the order of derivative is denoted by a letter or

an arabic numeral, then this letter or numeral is written in parentheses; for example:

$$f^{(3)}(x), f_{(y)}^{(a)}.$$

2. To denote first or second derivative in special cases it is permissible to use one or two dots placed above the dependent variable; for example:  $\dot{r}, \ddot{x}$ .

$\frac{d}{dx}$  first derivative of some function of variable x;  
for example:  $\frac{df}{dx}, \frac{dy}{dx}$ .

$\frac{d^n}{dx^n}$  derivative of n-th order, for  $n > 1$ , of some function of variable x; for example:  $\frac{d^2f}{dx^2}, \frac{d^3x}{dx^3}$

$f'_x, f'_y, f''_{xx}, f''_{xy}$  derivatives of  
function f

$\frac{df}{dx}, \frac{df}{dy}, \frac{d^2f}{dx^2}, \frac{d^2f}{dxdy}$  of several variables x, y, z...

$\sum$  Sum; for example  $\sum_{k=1}^n u_k = u_1 + u_2 + \dots + u_n$

$\int$  Integral  
 $\int_a^b$  Definite integral from lower limit a to upper limit b.

$\prod$  Product: for example:  $\prod_{k=1}^n u_k = u_1 u_2 u_3 \dots u_n$

$n!$  factorial; for example:  $n! = 1 \cdot 2 \cdot 3 \dots n$



## Addendum I.

List of Standards of Letter Denotations Included  
in the Compendium, and their Abbreviated Designations

Numbers of Standards	Title of Standards	Abbreviated Designation of Standards
GOST 1075-41	Axes of coordinates and basic denotations used in aerodynamic and hydrodynamic computations in airplane construction	Hydro-aerodynamic computations in aircraft construction
GOST 1493-42	Denotations of basic, general technological quantities (by letters)	General technical quantities
GOST 1494-42	Electrotechnics. Denotation of basic quantities (by letters)	Electrotechnics
GOST 2653-44	Basic concepts and quantities of photographic sensitometry (terminology)	Photographic sensi- tometry
GOST 2899-45	Theory of mechanisms. Basic letter denotations	Theory of mechanisms
OST 2932	Denotation of basic quantities in theoretical mechanics	Theoretical mechanics
GOST 2970-45	Hydromechanics. Basic letter denotations	Hydromechanics

GOST	Construction mechanics. Basic letter	Construction
2971-45	denotations	mechanics
OST VKS	Hydrotechnics. Denotations of basic	Hydrotechnics
6128	quantities	
OST VKS	Denotations of basic quantities in	Sanitation
6129	sanitation technology of water supply	technology
	and sewerage	
OST VKS	Denotations in geometrical optics.	Optics
6145	Basic	
OST VKS	Denotations in physical optics.	Basic, Optics
6146		
OST VKS	Basic denotations in astronomy	Astronomy
6203		
OST VKS	Denotations relating to measurement	Measurement of
6261	of temperatures	temperatures
OST VKS	Terms and denotations relating to	Measurement of
6262	the field of measurement of liquid	pressure
	pressure, vapor and gas by means of	
	manometers	
OST VKS	Advanced geodesy, topography, baro-	Geodesy and
6345	metric leveling, gravimetry, carto-	cartography
	graphy	
OST VKS	Basic concepts, terms and denotations	X-rays technology
6350	in the field of X-rays.	

OST VKS 6394	Denotations of basic quantities of technical thermodynamics	Thermodynamics
OST VKS 6896	Terms, denotations and measurements in the field of ferromagnetic phenomena	Ferromagnetism
OST VKS 6954	International temperature scale	Temperature scale
OST VKS 7082	Denotations relating to the field of terrestrial magnetism	Terrestrial magnetism
OST VKS 7144	Denotations in aerial photography	Aerial photography
OST VKS 7158	Terms, denotations and measurements in the field of time measurement	Measurement of time
OST VKS 7530	Conic connections in machine build- ing	Conic connections in machine building
OST VKS 7637	Light measurement. Basic terms and denotations	Light measurements
OST VKS 7771	Dielectrics. Terms and denotations	Electrotechnics
OST VKS 7772	Heat measurements. Basic concepts, terms and measurements	Heat measurements
OST VKS 7820	Temperature. Measurement of tempera- ture in national economy. Terms and measurements	Measurement of temperature



OST VKS 8822 Constants, radioactive

Radioactive  
constants

OST

Conventional letter denotations in  
the design of building constructions

Building  
constructions

90054-40